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THE INLAND ARCHITECT AND NEWS RECORD.

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FLOOR plans are so necessary to the full understanding of designs that we shall hereafter, as far as possible, publish with each photogravure plate, the principal floor plan. This we have done with two of the photogravure plates in this number.

WHEN a distinguished sentimentalist declared that America was not fit to live in because it had no ruins, we only laughed at him. We were busy with achievement; for us was the future with its manifest destiny that our orators foretold; we were to hasten the fulfillment of that destiny by all manner of worthy activity. We were right in this. We had not the ruins and dared not lose opportunities of today and of tomorrow, while we lamented the brevity of our past. But the sentimentalist, too, was right in much. The nation, on its birthday anniversary, takes account of something more than stocks and acres and factories; for it is neither an agricultural community nor an industrial society, but a solidarity of souls; its inventory is of men and women, and its largest attainment is in the fullness of the manhood of its men and the womanliness of its women. And the manhood and womanhood of today is inseparably bound up with the past. To the individual an established reputation for unblemished character and an honorable pride in the achievement of his past are a safeguard from pitfalls and an inspiration to sustained endeavor. So in the nation the consciousness of its historic national life, the honorable pride in its past character and achievement, the heritage of the lives of its great and typical citizens, and of their doing and daring for the nation's sake; these are to a nation a guaranty of the future, and this appreciation of its past becomes in the minds of its citizens a ground of union and a bond of sympathy that ward off civil strife and keep alive in sluggish times the spirit of the people. And, so in its ruins, a nation may have in its midst a perpetual reminder of its past greatness. It is a great step forward in the attainment and consolidation of national unity and spirit when a people first begins to set a high value on its past. And thus every crisis in the national life, successfully surmounted, becomes a guaranty of the future, and its influence on patriotism atones in a measure for the cost of victory in blood and treasure. With this self-conscious national life, this national self-respect, comes the nearer likelihood of the happy, spontaneous growth of national letters and art. For this reason we welcome the evidences that are given of the existence of an American national spirit in the efforts, on all sides seen, to erect monuments commemorative of the nation's past on spots that shall be, nay, are historic in our national life; monuments that shall live in the thought and vitalize the imaginations of generations to come.

IT is a pity that business shrewdness does not guarantee good taste; that a lofty sentiment does not dictate its fit and lofty expression; that patriotism and the desire to commemorate the past so often take on petty and pusillanimous and ludicrous forms. Here, for instance, is a great state, famous for its copper, its iron, its lumber, its salt, famous indeed for the high average intelligence of its citizens and the wide dissemination of educational advantages. The legislature of this state falls in line with a patriotic movement, and decides to erect on the field of a memorable battle of the civil war monuments in honor of the victory of the nation over rebellion, in honor of its regiments that participated in the battle, and of its dead who died for the unity and integrity of

the nation. Here is a worthy cause. The legislature appropriates a sum of money which is then divided as follows: \$5,400 for a cavalry monument, \$1,350 each for seven infantry monuments and \$1,000 for a battery monument. Then an invitation is sent out to designers to send in designs for nine monuments to be erected in granite and bronze. We pardon the ineffective effort when necessity has dictated the uses and dimensions of a structure and limited funds compel to an inadequate and inartistic treatment; utility must be served, and when we cannot make utility beautiful we can content ourselves with honest plainness. But a structure or a monument that has its origin wholly in sentiment, which is neither necessary nor useful except as it subserves sentiment, what excuse is there for its existence in petty or crude or contemptible or fantastic guise? It is the offspring of an emotion, and by virtue of that relationship should conform to its origin and should be massive, or airy, or dignified, or graceful; but it should neither be commonplace nor ignoble.

ART has no room for ignoble or commonplace emotions, and the world has no room for their embodied offspring, Wordsworth to the contrary notwithstanding. The poetry of the commonplace had best be left unsung. We need not fall into the error of mistaking size for art, but there is size for this purpose and a size for that. And a monument in an open field, on a rocky hillside or the skirt of a woodland is not to be treated with the minuteness of detail and delicacy of conception that are called for in interior work, and that in suitable climates might be called for in the public square of a city. A battlefield monument, we take it, should have bold, strong, clean-cut detail, on a scale adapted to its position, and the monument should itself be massive, and the whole of perfect workmanship. In this competition a sum scarcely adequate for a single creditable monument is so divided up that the result will be likely to be a collection of something worse than blocks. For committees are prone to want the soldier with his rifle and the cavalryman on his horse for a sum that will barely suffice for a pedestal. And no doubt blocks are to be preferred to the kind of thing that such a demand produces. Of course, the purpose of the division of the appropriation is to place a monument where each regiment engaged in battle. But we cannot but think that it is a great mistake, and one which will hardly redound to the good judgment of the committee or to the credit of the state.

BUILDING accidents are alarmingly frequent, and seem to keep even pace with the increase in building throughout the country. Resulting usually from gross carelessness, ignorance, stupidity or other preventible causes, and avoidable by simple and well-known precautions, they recur year after year with disgraceful regularity; and as no remedy has yet been proposed, but a multiplication of building laws and building inspectors, we cannot hope for any speedy improvement. For if there be one thing plainer than another in this country of ring political misrule it is this, that inspection does not protect. Were it possible to frame an approximately complete and perfect building ordinance, which would not prove by its multitudinous precautions, requirements and probabilities more of a bane than a blessing, and to preserve it from being amended and inverted at each successive meeting of the municipal assembly; and then, possible to select about a tenth of the population for building inspectors and keep several of them at each new building all the time till it was done and occupied, there would still be some contractors and some workmen who would contrive to scamp their jobs occasionally, though if the inspectors were all honest and capable there might not be many accidents.

BUILDING laws, if expressed in general terms, are open to evasion by the unprincipled; if minutely detailed they are apt to return in boomerang fashion upon their authors. For their enforcement inspectors are appointed, and while building accidents are constantly recurring under the very noses, as it were, of the inspectors, the American people seem firm in the belief that the way to prevent such disasters is ever to make a new law and appoint more inspectors. Could any plan be devised to secure honest and capable inspectors without fail, and to sustain and reward them in the inflexible performance of their duties,—but what intelligent American citizen does not know perfectly that such a thing is out of the question, except in occasional and isolated cases and for a very uncertain tenure of office? At the time of the celebrated Buddensiek accident in New York, two years ago, *Harper's Weekly* remarked: "The building law of New York City is worth no more than Buddensiek's mortar—it holds nothing, and the city would be better without its pretended security." One of the inspectors testified in court that he knew little about masonry and nothing about mortar, and could not tell the difference between genuine mortar and Buddensiek's mud. Another inspector had long been known to be incompetent and his chief had tried to dismiss him, but he was retained through political influence.

IN another metropolitan city there were twelve sanitary inspectors, whose special duty it was to ferret out bad plumbing and drainage. Only one of the twelve was a plumber. In the city of Brooklyn, very recently, the following paragraph appeared in a daily paper: "A clean sweep is being made in Brooklyn under the new political rule. Acting under orders * * Commissioner Murtha visited all the stations along the line of waterworks. He carried with him a blank form of resignation which every employé signed, * * * How much politics guarantees a little knowledge of hydraulic engineering, is a conundrum the citizens of Brooklyn appear to have no present ability to secure an answer to." In New York City a commissioner was appointed to direct and control the placing of telegraph, telephone and electric light wires underground. Eminently scientific and practical names were recommended for this purpose, but politics prevailed here, as everywhere, and the parties selected for this difficult and important charge were Jacob Hess, butcher; Theodore Moss, theatrical manager, and C. E. Loew, steamboat agent. Such being the style of our political appointments all over this broad land, what can be more unreasonable than to rely for safe building on city ordinances and salaried city inspectors?

THE suggestion has recently been made in several quarters, that all labor organizations should be compelled to obtain a charter under a general law, framed for that purpose; that none should be permitted to exist without a charter; and that a violation of the conditions set forth in the law should operate to revoke the charter. Such a law, if practicable, would go far toward doing away with a standing objection urged by employers against all schemes for the profit-sharing, coöperation and sliding-scale wages, namely, that the employés are irresponsible and cannot be held to a contract. If, with this, it were possible to couple a law requiring all corporations existing by public franchise, and performing an indispensable public service, to submit to arbitration before a legally authorized tribunal all disputes with their employés, we might hope to see established that voluntary permanence of the relations between such corporations and their employés which is necessary to the public welfare, and the successful conduct of industrial enterprises.

Photography in Architecture.*

PART IV.—BY FRED D. FOSS.

IT is supposed that the camera, lens, tripod and plate-holders have been purchased, and that the purchaser has become familiar with them to a certain extent; that he has carefully inspected the camera, plate-holders and lens mount, and made sure that no annoying rays of white light can enter at any point; that he has placed the sensitive dry plate in the plate-holders, secured the plate-holder slide in position, and is now ready to make the initial exposure. A few words in reference to placing the camera in position to photograph an object may be instructive. Having selected a subject which, for convenience, we will assume is architectural, select the point of view desired, and proceed to place the camera in position. This is done by first unscrewing the tripod legs and extending them to their full length. It is assumed that a tripod of the Scovill or extension pattern has been selected, as they are the most convenient. Now place the camera on the tripod head and screw it securely in place by means of the long screw, which is found in the center of the tripod head; next place the camera in a horizontal position (a small pocket spirit level will be found very useful for this purpose), and regulate the tripod legs until the ground glass of the camera is at a height suitable for the subject, or, in other words, to bring the object in a proper position on the ground glass, bearing in mind that as the picture shows on the ground glass so it will show on the negative; now focus, which is done by means of the rack and pinion on the front of the camera bed, until the object is sharply defined on the ground glass; now take particular notice of the picture, and see if it is in proper position, and if the position on the ground glass is satisfactory, cover the lens with the lens-cap and insert the plate-holder in its proper position, being very careful not to move or jar the camera in any manner, draw the slide and you are now ready to make the exposure. By exposure is meant the interval of time between the uncapping and recapping of the lens, and during which the sensitive surface of the plate in the plate-holder has been exposed to the action of the light. This action is attended with more uncertainty, and requires more judgment and experience than any other in the course of taking a negative. An exposure made at, say 2 P.M., may require an exposure of half a second, while an exposure made half an hour later may require an exposure of eight seconds. Such is the variation in the power or strength of the light. The exposure is regulated or controlled by two different causes, namely, the strength of the light and the area of aperture in the diaphragm used. These diaphragms are small plates of iron or brass, all of the same external size, but having central circular openings of different sizes. They are usually contained in a leather case, and fit in a slit in the brass mounting of the lens, and the quantity of light that passes through the opening in the diaphragm in a given time is necessarily dependent upon the area of this opening. As the effect upon the sensitive plate depends on the quantity of light falling upon it in a given time, the exposure must, therefore, be much shorter when that light is allowed to pass through a large opening than when it comes through a very small one. Consequently, to obtain upon the plate with a small opening the same effect as is produced in a given time by the larger one, the exposure with the former opening must be proportionally prolonged. After having ascertained by experience about the time of exposure required by any one opening with a given lens, the time required for any other opening is a matter of calculation, and will be shown hereafter. As most of the pictures, it is assumed, will be of architectural subjects, a well-lighted subject, taken with a diaphragm having an opening of one quarter of an inch in diameter will require an exposure of two to three seconds. Plates that have been exposed in the camera, but not yet subjected to the subsequent operations of developing the latent image nor the final one of fixing (afterward to be described), must be carefully protected against the action of ordinary sunlight, gaslight or candlelight, as those that have not. By a well-lighted architectural subject is meant a sunlit scene, and the time of exposure, say two seconds, is sufficient for a one-quarter inch diaphragm. Now, if we desire to work more quickly and use a one-half inch diaphragm, the necessary exposure would be in the inverse proportion of their squares. As the area of the one-half inch opening is four times that of the one-quarter inch, the exposure with the one-half inch opening will be one-fourth that of the latter, or, in other words, one-half a second, and *vice versa*. As a defect in the time of exposure may be remedied in the development, extreme accuracy in these calculations is not absolutely necessary; but it is the better plan to always calculate the exposure as accurately as possible; for every plate exposed there is but one exposure correct; all the others are wrong, and while a miscalculation in an exposure may be remedied to a certain extent, perfect exposure and perfect development give perfect negatives. As the exposure depends upon the strength of the light primarily, it is proper to mention in this connection that the strength of sunlight varies very much according to the season of the year,

being the greatest in midsummer and the least in midwinter; and these lights are occasionally modified in summer by being very much *reduced* by a yellow tinge in the atmosphere, and *increased* by a covering of light, fleecy clouds, and in winter it is augmented by the presence of snow on the ground. The best pictures are not produced by exposing, as many suppose, during the middle of the day; but in the morning or afternoon, when the sun's rays are more removed from the perpendicular, the most pleasing effects are secured.

(To be continued.)

Broad Art Criticism.*

BY JOHN W. ROOT, ARCHITECT.

I DESIRE to except the art of music from the following remarks: At no period of the world has art been so prolific as now. At no time has interest in matters of art been so general. And yet we lament the undoubted decadence of our day from certain great epochs when art possessed a grandeur, nobility, simplicity, and inspiration beside which our own creations seem weak and meaningless.

The causes of this state of things are not far to seek. Whenever a people are inspired and dominated by a few great ideas, their art necessarily becomes great. The works of the Renaissance are greatest of all modern creations, not because of any ethical quality *per se* within them, but because all the varied and vital forces of the time, numerous as they were, flowed most strongly through a few great channels. Thus the artist, who is but the lens which receives and focalizes influences about him, was strongly moved and powerfully worked. In our own time the universality of civilization, the wide interest of our thought, the questioning attitude of our minds, all conspire together to produce an atmosphere hitherto most hostile to the production of great works of art. Except so far as demonstration is mathematical, men no longer believe profoundly; the subtler ether of pure imagination is displaced by the heavier air of demonstrated fact. I remember to have heard a gentleman with some pretense to culture, and with some fondness for art, condemn Holman Hunt's "Flight into Egypt," because, as he said, "Nobody in these days believes in such nonsense as angels."

What the outcome will be of the conditions now about us, no one man may say. There are reasons for believing that from out this ferment may come a new, richer and stronger imagination, and consequently a new and stronger art. But whether this be true or not, it must be confessed that ideas are now so rapidly shifting that few of them rest long enough to crystallize into images which the painter can transfix.

The one quality in all art which the genius of this age insists upon is accuracy. All other forms of merit must stand aside for this; any other crime may be pardoned but that of untruth. Not untruth in the large and comprehensive sense, but in the small and microscopic sense, which by undue insistence upon each small detail produces in the aggregate of all these details a result widely removed from the truth, which, in short, produces, either as to ideas or technique, a false perspective. Glance for a moment at the present status of art in several of its different branches, and everywhere you meet one all-present and chiefly insisted upon attribute—technique. A painter prepares for himself a moving platform that he may in drawing a horse follow his action with greater accuracy. He frequents the morgue that he may better paint the hue of death. The architect searches all ancient and modern times that his design may be undeniably in the style of this or that period.

France, the long time art leader of the world, has become the chief home of magnificent technique. Here what the man does is of much less consequence than how he does it. His creation may lack aim, it must not lack method. In every art true sentiment and inspiration have fled, and in their places we have thousands of works, cheap in idea, clever in execution. Nudes, which, instead of lifting the human form into diviner dignity, debase it to the level of the pavement—pictures of all sorts of peasants, in costumes devised to show good "handling"—all sorts of juggleries with nature in landscapes painted to show what you may see with your eyes half shut, or if you were astigmatic, or if you had eyes a foot wide.

The average American painter follows these traditions as a matter of course. Living in a country which he feels to be without tradition, without romance, without art, he naturally turns to those countries where a certain inspiration may be cheaply had, and where he may be assured of well-defined and invigorating emulation. In other words, he finds himself so out of sympathy with his environment that his creative powers lie dormant until by remote influences they are quickened into action, a form of life which, we must grant, is far from normal.

Architecture similarly devotes itself to this sensation making. Renaissance follows Renaissance so fast that the new birth never gets past its teething age, and dies before we know the color of its eyes or what its form and complexion would have been. In England and America this race after new sensations has been peculiarly mad. Within the memory of the youngest of us, architectural creations have twice over embodied the whole history of architectural development from Hiram to Norman Shaw. The dinner has been one long succession of dishes—soufflés and salads—ices and sweetmeats, most fascinating to the eye and to the palate, but each so unsubstantial and each so quickly removed that the appetite is both jaded and unsatisfied. In America, a new dish has been prepared for the palate thus exhausted. It may be called *rôti à l'Hottentot*. Its ingredients are chosen from among those things which all previous architectural cooks have considered inedible; and sauce, it has none. In preparing the house according to this new recipe of our *cordon bleu*, you begin by making believe that you live in an age before the discovery of

* Continued from Vol. X, No. 9, page 95.

* Paper read before the Chicago Architectural Sketch Club, January 16, 1888. Revised by the author for the INLAND ARCHITECT.

stonecutter's tools; you then roll into a mélange a heap of bowlders, cook very rare and serve cold.

France, escaping these forms of development, has been afflicted with one scarcely less unfortunate, for here certain types have become so inevitable that they have ceased to be vital and exist only by grace of expert medicine and dietetics.

In what I believe to be this general decadence of art, America has been the chief sufferer. If no Anglo-Saxon inheritance of "common sense" had been ours, the imperative necessities of a people forced to bread winning and to forest clearing—the high pressure upon each individual of a mass so rapidly multiplying in numbers and in wealth—would have made it inevitable that among all civilized countries ours would have been the most uncongenial home of art. As yet we have no art distinctly American. Occasionally it has so far developed among us as to reach its voting age, and frequently it has come to us from abroad seeking naturalization. But when we seek for the art which in form, color and movement shall be recognized as of the soil we seek in vain. Yet not wholly in vain. The observant student will discern in the apparent hopelessness of his search, tendencies which indicate the coming of an art in all respects our own.

To all foreign nations our lack of æsthetic instincts has hitherto been a byword and reproach; and yet, let us see if in this respect we are not fortunate because of our previous history. The intensely practical life hitherto forced upon the nation has of necessity created an atmosphere in which art could but be one of two things, boastful and meretricious, or servile and imitative. On the one hand, the artist, hampered by neither knowledge within himself nor within the community, aspires to the loftiest heights of Parnassus. He paints great historical scenes which tell anew the triumphs of his countrymen and the craven spirit of their foes; he carves statues of Columbus supporting the world; he creates new and national styles of architecture. Meanwhile, indifferent to such trivial questions as the relative lengths of human arms and legs, the laws of perspective, the essence of true style, poets sing his fame, essayists and critics point out the beauties of his work, and all his admiring fellow-countrymen speak of the great Smith, and the superiority of American art as exemplified in him.

On the other hand, the man who sought his ideas abroad was equally unfortunate. His opportunities of study were limited by the poverty of the country and by its strongly marked political prejudices. Influences received in foreign schools were not wholesomely received, because the student could not occupy a position entirely healthful and normal. His place was analogous to that of the charity scholar who is forced to the wall by the prestige of his fellows; or the commonplace student in the atelier, whose creative forces are absorbed and destroyed by the strong personality of his master. Moreover, the crudeness and inadequacy of our own history compelled too great deference to the histories and traditions of older countries, coupled at the same time with enforced ignorance of the vital meaning of those histories and traditions.

These influences affected all classes—artists and laymen. The day is just past, certainly in some parts of the country, when honestly accepted Da Vincis, Raphaels and Titians, were as common as are now the works of such miraculously prolific men as Daubigny, Corot, Rousseau.

This false condition is now changed, and American students have at least this advantage, that while they have no great national art history they certainly have no ignoble history; for all that has been done up to the present counts for nothing. They are therefore free; free in a deep and significant sense. Artists in other countries may have the advantage of a greater art momentum, but we, approaching their traditions from without, and reinforced by what is now conceded to be a great national spirit, have the advantage of clearer vision and judgment.

This leads us to call attention to several traits of the American mind—in so far as we yet recognize it as typical—which are promising for the future of art in America. The national mind is peculiarly open; it is freer from prepossessions than any other; it is fair and level, not set in certain grooves and fixed with unchangeable tendencies. To this are added quickness of receptivity almost unparalleled; readiness to receive impressions and acute sensitiveness to environment; humor broad and fanciful, vailing at times beneath its play the depth and seriousness of mind which is also typically American. The combination seems to promise that we will have much of the elemental stability and seriousness of mind of the Mother Country, modified by the lightness of fancy and imaginative vivacity of the French.

This should certainly be a national type well endowed for large successes in the domain of art. Unfortunately, any search for the typical American mind must be like the scientist's search for the typical American physiognomy; it can go no further than tendencies and temperatures. Yet, whatever be true of the American type, we must fully recognize that a great and vital and national American art is rendered possible by certain conditions alone; and these conditions can be realized only in the full recognition by each American of the thing to be accomplished and the methods of accomplishment. What then must become our attitude to art, to hasten the consummation so much to be desired?

First, let us remember that never in the history of the world was art so important to men as now. To extend and make more accessible to all men the avenues of pleasure hereby afforded, to make it not only possible but profitable that there should be added to the task of each laborer the quality which means to him and to us pleasure in his work—this means to both laborer and capitalist content and happiness. Surely never was the relation between these two classes so strained as now, and never could either class less afford to treat lightly whatever remedy seems likely to alleviate the diseased condition.

The measure of personal responsibility forced upon us by the inherent greatness of all art questions is here added to with such vastly increased force that no individual should dare shrink from his own full share in it. Until each person assume this personal responsibility he has no part in the movement toward higher art, contributing nothing toward it; nor can he call himself a true lover of art until he finds his love personal. There is too much platonic love of art. Too many men worship by proxy at the altar of Pallas.

It is certainly well in determining our own relation to the art of our time and country carefully to weigh the general sense of popular taste, estimating its drift and quality, and to lean to some extent upon the taste and judgment of expert critics; just as it is well for a man to ascertain what other people think of his sweetheart. But far beyond this is the absolute necessity that each man should cultivate and exercise tendencies and sympathies of his own. This does not mean the lowering of our art standards; to follow unthinkingly the lead of self constituted critics is to do this. When a man is to stand so absolutely upon his own feet as to ask no one to lend him support, he must beforehand know something of his own strength.

When once we become free from the unwholesome dread of critics, and at the same time recognize the largeness of the questions we assume to decide, we take care before deciding that we have sufficiently studied the question to be sure of correct judgment. By this independence of opinion is at once brought into existence an art atmosphere full of potency. While each man, thoughtful and studious though he be, may not lift against the all-powerful critic one feeble protest, fashion has full sway; and fashion is the false friend of art, killing it while promising life and support. When, on the contrary, each member of a community not only equips himself to think but does think for himself, in art as in business, the critic becomes either impotent or competent, and in either case art is vastly the gainer. Fashion, determined by the senseless dicta of self-constituted leaders, and obeyed by servile followers, destroys in art all continuity and therefore all development. Individual freedom of action, on the contrary, leads to that wholesome growth which is strong and self-sufficient, and which rapidly assumes truly national and permanent homogeneity. Fashion creates the anomaly of each man's being compelled to wear for himself a ready made art averaged to the community, in doing which no allowance is made for his various individual tendencies, which should find full expression, and in natural accommodation to which art becomes not only more diversified but more vital.

In thus exercising individual influence, and assuming individual responsibility, personal acquaintance with artists is of great value. To the artist himself no spur can be greater than to know of the actual and expressed sympathy and approval of laymen. To him it is an inspiration, and in this direct intercourse he finds himself continually brought to self-analysis and self-correction. He finds himself less likely to get into ruts; his ideas are expanded and multiplied. To the layman it becomes a source of cultivation, bringing to him phases of art which he would not otherwise recognize, and leading him to become day by day a more enthusiastic art lover and patron.

A point here which may not be of immediate or practical value to us personally, but the importance of which in itself cannot be exaggerated, is the necessity of learning to draw. It is generally confessed that a man is inevitably removed from closest contact and sympathy with an art or science who has not wrought in it with his own hands. To have held the pencil or brush sufficiently to know what it is, to have labored to produce objects about us upon paper or canvas long enough to know its difficulties, is to any man a help which the man without such experience can never know. Were he in after life never to touch pencil or brush again, the mere fact that something has been taught him of how to see *picturesquely* gives him a clearness and definiteness of vision which makes him vastly the superior in this respect of his half blind friend. It is, I believe, true that no branch of learning should be more universally taught than drawing from nature.

Assuming that in the layman there exists a predisposition to friendly criticism, and at the same time a genuine love of art, two questions present themselves. The first touches the broad definition of art itself, and the second the recognition of its presence to greater or less degree in individual works.

As to the first question the essential point is not "What is a work of art?" for upon this, as an abstract question, men are well agreed; it is rather what constitutes the measure of beauty in a work of art. All sorts of answers are given to this question. The answer most nearly true seems to be that given by Mr. Leopold Eidlitz. "The perceived magnitude of creative force contributes what is known as the beauty of any art work. Hence to the person observing a work of fine art, his appreciation of the magnitude of this creative force is his judgment of the degree of its beauty. The ultimate end of criticism is to ascertain the quantity and quality of the force thus manifested; and also what part of this force is due exclusively to its author, and what is due to the general state of progress at the time of its production." In other words, a work of art is beautiful only when it embodies in stone or pigment or in some other visible or audible medium some distinct and recognizable idea, and since in general it is true that greater force is involved in the creation of a great idea than a small one, that art work which best expresses a great idea is greater than one which expresses a small idea.

The strength of the creative force must, however, be measured by several means. As Mr. Eidlitz has said, "To illustrate correctly the physical force exercised by a man in carrying a burden, we have to consider not only its weight but also its bulk and the bulk of the man himself, for both constitute elements of load and displacement of atmospheric air; not only the distance for which the burden is to be carried, but also the inclination upon which the man travels, whether he goes up hill or down; also what are his means and methods; whether he carries his load in one load on his shoulder or on his head."

So in analyzing any work of art, in the effort to arrive at the true value of its creative force, all the circumstances attending its creation must be carefully weighed. When this has been done, then and then only are we prepared to recognize how much of himself the artist has put into his work, and how much of real beauty the work has. Any possible process different from this, which we adopt in the hope truly to estimate the inherent value of such work, is misleading, and tends to foster false ideas and bad art.

The great trouble with the various schools of art of today is just this, that nowhere do we find groups of men, scarcely even individuals, engaged in the serious endeavor to realize in outward form great ideas. On the

contrary, as has been before noted, we are daily called upon to lament the vast power recklessly wasted upon insignificant ideas; the industry of the brush and the pencil, the paralysis of the brain.

If what has been said as to the true nature of art work and its criticism be true, it follows that in all truly great work the idea expressed should be distinctly greater than the method of its expression.

I am aware that in the case of a few great men the end and the means have risen so nearly to the same level as to produce results of unrivaled splendor. But these periods in art have been few and their continuance short. Preceding them were always men striving to attain by imperfect means the realization of great ideas, and following them men content perfectly to express small ideas. Why should a painter, master of a technique which is baffled by no obstacles, content himself with the representation of things so cheap in thought as to be worthy of children and imbeciles alone. Why should architects, capable of accomplishing work worthy to live in constantly renewing beauty and grandeur, commit themselves to crudities and trivialities which they know will be contemptible to even themselves five years hence. Why? Because we uphold them in it. Because the man who assumes the great responsibility—for great responsibility it is—of spending \$5,000 for a picture, or \$50,000 for a building does not recognize the fact he is purchasing for himself and for the community either just so much of added delight and mental and moral elevation, or a contrary sum total of enervation and debasement. It is a crime for anyone to spend on an art work money which through other and lower channels would purchase happiness for many persons, without making sure that he is purchasing equivalent possibilities through higher channels.

Great technique is not to be despised. But while great ideas demand great technique, it is monstrous that great technique should be debased to small and ignoble ends.

Every work of fine art is the expression of one dominating idea. It may and generally does express others also, but each dependent idea is colored and governed by that which is supreme. Each true work of art becomes therefore homogeneous in itself—consistent throughout. Any detail which creates a discord, and thus tends to diminish the force of the central idea, makes the work to that extent less than a work of art. It is this dominance of one leading quality over others which is an absolute test of the merit of any art work, as it is the law which creates what we call "style."

In architecture it lies back of every one of the great historical types, and it is at once their cause and justification. The style thus imparted must not be understood to be, in painting, sculpture, or architecture, a thing of exterior form alone. It lies far deeper. It is the life and existence of the work.

As far as material conditions permit it to be possible, a building designated for a particular purpose should express that purpose in every part. The purpose may not be revealed by conventional means, but it must be so plainly revealed that it can be escaped by no appreciative student.

Ascertain first what are the conditions essential to the function which a house is to perform, and the force with which that function is expressed measures its value as a work of art. The architect may choose different methods for this expression, suiting his method to the general result he has in mind, but the result must be both homogeneous and typical. It thus becomes necessary in estimating the merit of a house or a picture to know not only its general intention, but also the point of view of the artist and the methods by which he has sought to express the general intention. Much of the stability, hospitality, comfort and refinement of the household may be expressed by a design of the most obvious character, whose sole reason for recognition as thus expressive lies in its common association with comfortable households. But the great art work is that which expresses the same intention by less obvious but more inherently significant means—means vital in themselves—the sweep of roof-lines—the general repose of mass—the delicacy and grace of ornament—the generosity and openness of aspect.

What has just been said indicated another essential characteristic of all true art work—moderation. All strength associated with long endurance has this quality. The force which exerts itself intemperately is always short-lived. So the art work which, by excessive display or by wasteful use of means, captivates at first glance, has within itself the seeds of its own destruction. Given a problem to be solved—many methods may possibly serve, only one can be best. When that one is chosen and resolutely followed, the work so produced communicates pleasure of the highest kind. The self-denial of the artist—the self-mastery—the strength—the concentration, breathe in the work, and give to it vitality and beauty of the highest order.

Works so produced are always simple, as they are courageous and fervid.

The creative force operating with this self imposed moderation tends to expression by simple means, for the thought repressed till fully ripe for utterance becomes a jewel too valuable for prodigality; and the mind thus withholding itself from light utterance speaks with boldness begotten of conviction, and with fervor kindled by fulness of thought.

No tropical luxuriance of fancy can for a moment be worth the art work which has been created in this intense workshop of the brain, where high ideals have been applied with singleness of purpose; where self-denying scrutiny has permitted the use of none but the fittest thoughts; where with simplicity and courage and fervor all has been welded into one consistent and inspired whole.

About an art work so created, critics may at first disagree. But they, and all men, finally bow in reverence before it, and it becomes to all men a refuge from care and sordidness, a source of moral and intellectual delight and elevation.

This condition of mind in the artist can be engendered only by full absorption by him of all those influences which lie most closely about him, with which he is most familiar because of daily association. Remote and unfamiliar aspects of nature, or types of men, or conditions of life cannot be felt with earnestness sufficiently deep to fully permeate the art work

produced under their influence. In all the history of the world it has been true, and it must always remain true, that the art work of one nation which has gained its inspiration solely from another has been worthless. So true is this that you will note in even the historical paintings of every great master previous to the nineteenth century the reproduction of human types with which he was familiar, and an absolute indifference to the historical accuracy of the types represented. An exactly parallel condition existed in every form of art work—painting, sculpture, decoration and architecture—the artist was far more concerned in representing essential ideas in his problem than in spending time and labor upon what he conceived to be non-essentials. At present this state of things does not exist. Perhaps it can never again exist even if it should be found in every sense desirable. This, however, is axiomatic, that any art of any time in becoming great becomes national; and that laymen, contemporaneous with this great art, love best the ideas which are familiarized to them by long custom.

Our present attitude is false in this respect as much as in any other, that we do not value rightly that which normally should be of most personal significance to us.

The skies we see each day, the grass we tread upon, the trees beneath whose shade we rest; the men we meet and understand; the histories which thrill our hearts with national pride; these are subjects which may profoundly speak to us from the canvas. So with our own peculiar climates and manner of living; the scorching heat of summer, the winter's bitter cold; our freedom and hospitality; these are *motifs* which when recognized in our architecture should give us keen delight. I do not wish to advise the patronage of American art because it is American, but I do say that if we really love art we can get more pleasure from art work which deals with conditions we know and rightly value, than from such, even if somewhat better in themselves, as are by virtue of their *locale* comparatively strange to us.

Ours should be the task to help every artist who will summon before our delighted eyes in significant beauty all those conditions of nature, in landscape, in men, in the household, in society, whose beauty we know truly belongs to us. When this comes about, art schools—artists and sympathetic patrons—American art, in short, will be here.

The President of the Western Association of Architects.

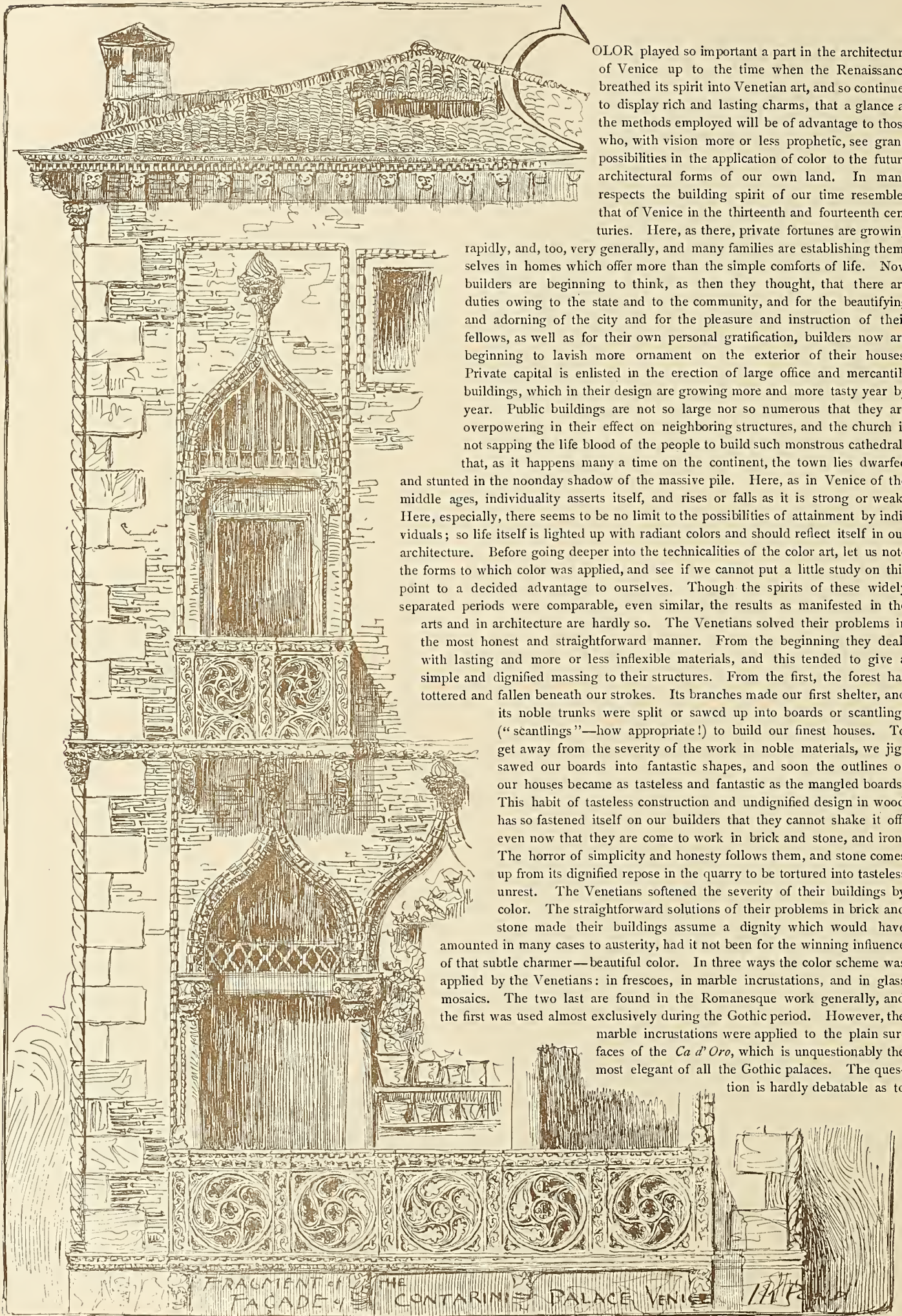
SINCE the election of Architect Sidney Smith, of Omaha, Neb., to the presidency of the Western Association, many biographical sketches have been published which have not presented that gentleman's career as adequately as might be wished by the association, whose unanimous choice he was.

Sidney Smith was born in the cathedral town of Norwich, in England, and educated in the King Edward grammar school of that city. Was then articulated to the firm of I. I. Brown & Sons, who at that time were the architects to the dean and chapter of the Norwich Cathedral, and were employed in the restoration of that fine example of Gothic architecture and the just pride of the city. During this time Mr. Smith was a student and regular attendant at the art school and manual training college, studying hard and leaving no stone unturned in his ambition to attain the one great object, that of becoming thoroughly proficient in his chosen profession. After completing his term of service with Messrs. Brown & Sons, he was employed as assistant to several firms in London, and after applying for and passing a very successful examination, was admitted associate member of the Royal Institute. Mr. Smith, however, being possessed of a restless disposition and boundless ambition, applied for and passed another very successful examination, and was appointed clerk of works under the Royal Engineer department, and in 1861 left England for service in Australia and New Zealand. A varied experience met him in that country, for during his stay the Maori war broke out, which lasted five years, and for a considerable time the island was entirely under the military rule. The necessary buildings and public works carried on during that time, from a soldier's hut to the solid and substantial barracks, the construction of roads and bridges to the building of the great Waxwaikia bridge, then the longest in the country, over 1,800 feet, were carried out under his personal supervision. At the close of 1866 Mr. Smith was ordered to India, and during the next three years was engaged in China, Malta, Corfu, and finally to Ireland, where, in 1872, he completed the largest gymnasium in the country, also a riding school at Fermoy. It was at this time an epidemic broke out in the English parliament; the late Mr. Disraeli was attacked with civil service reform. This was carried on to an alarming extent, and one hundred and thirty-eight second and third class clerks of works were discharged to make room for a like number of old pensioners, who were considered able to do a little work yet for their pension. This reform, however, ended like many others, very disastrously for the people who have to foot the bills, to the tune of many thousands of pounds. Becoming very disgusted with his position, Mr. Smith sailed for this country, landing in Milwaukee, Wis., in 1874, following his profession with varied success; finally removed to Omaha in 1881, where he has since been located, and where he is so well and favorably known as a very enterprising, energetic, public-spirited, business man. At the time the INLAND ARCHITECT first suggested the idea of forming a Western Association of Architects, Mr. Smith was the first man to respond in favor of such an institution, and from that time to the present has been a staunch supporter and firm believer in the success of an association which now bids fair, when combined with its older sister, in being recognized as the National Institute. Mr. Smith is well known to many members of both institutes, having served two years on the board of directors of the Western Association before being elected to the presidency.

ST. PAUL'S CATHEDRAL, in London, is to be washed. Firemen are to be set at work with hose and brush to see if the blackened walls cannot be brightened.

Venice—A Color Study.

BY IRVING K. POND, C. E., ARCHITECT.



COLOR played so important a part in the architecture of Venice up to the time when the Renaissance breathed its spirit into Venetian art, and so continues to display rich and lasting charms, that a glance at the methods employed will be of advantage to those who, with vision more or less prophetic, see grand possibilities in the application of color to the future architectural forms of our own land. In many respects the building spirit of our time resembles that of Venice in the thirteenth and fourteenth centuries. Here, as there, private fortunes are growing

rapidly, and, too, very generally, and many families are establishing themselves in homes which offer more than the simple comforts of life. Now builders are beginning to think, as then they thought, that there are duties owing to the state and to the community, and for the beautifying and adorning of the city and for the pleasure and instruction of their fellows, as well as for their own personal gratification, builders now are beginning to lavish more ornament on the exterior of their houses. Private capital is enlisted in the erection of large office and mercantile buildings, which in their design are growing more and more tasty year by year. Public buildings are not so large nor so numerous that they are overpowering in their effect on neighboring structures, and the church is not sapping the life blood of the people to build such monstrous cathedrals that, as it happens many a time on the continent, the town lies dwarfed

and stunted in the noonday shadow of the massive pile. Here, as in Venice of the middle ages, individuality asserts itself, and rises or falls as it is strong or weak. Here, especially, there seems to be no limit to the possibilities of attainment by individuals; so life itself is lighted up with radiant colors and should reflect itself in our architecture. Before going deeper into the technicalities of the color art, let us note the forms to which color was applied, and see if we cannot put a little study on this point to a decided advantage to ourselves. Though the spirits of these widely separated periods were comparable, even similar, the results as manifested in the

arts and in architecture are hardly so. The Venetians solved their problems in the most honest and straightforward manner. From the beginning they dealt with lasting and more or less inflexible materials, and this tended to give a simple and dignified massing to their structures. From the first, the forest has tottered and fallen beneath our strokes. Its branches made our first shelter, and its noble trunks were split or sawed up into boards or scantlings

("scantlings"—how appropriate!) to build our finest houses. To get away from the severity of the work in noble materials, we jigsawed our boards into fantastic shapes, and soon the outlines of our houses became as tasteless and fantastic as the mangled boards. This habit of tasteless construction and undignified design in wood has so fastened itself on our builders that they cannot shake it off, even now that they are come to work in brick and stone, and iron. The horror of simplicity and honesty follows them, and stone comes up from its dignified repose in the quarry to be tortured into tasteless unrest. The Venetians softened the severity of their buildings by color. The straightforward solutions of their problems in brick and stone made their buildings assume a dignity which would have

amounted in many cases to austerity, had it not been for the winning influence of that subtle charmer—beautiful color. In three ways the color scheme was applied by the Venetians: in frescoes, in marble incrustations, and in glass mosaics. The two last are found in the Romanesque work generally, and the first was used almost exclusively during the Gothic period. However, the

marble incrustations were applied to the plain surfaces of the *Ca d'Oro*, which is unquestionably the most elegant of all the Gothic palaces. The question is hardly debatable as to

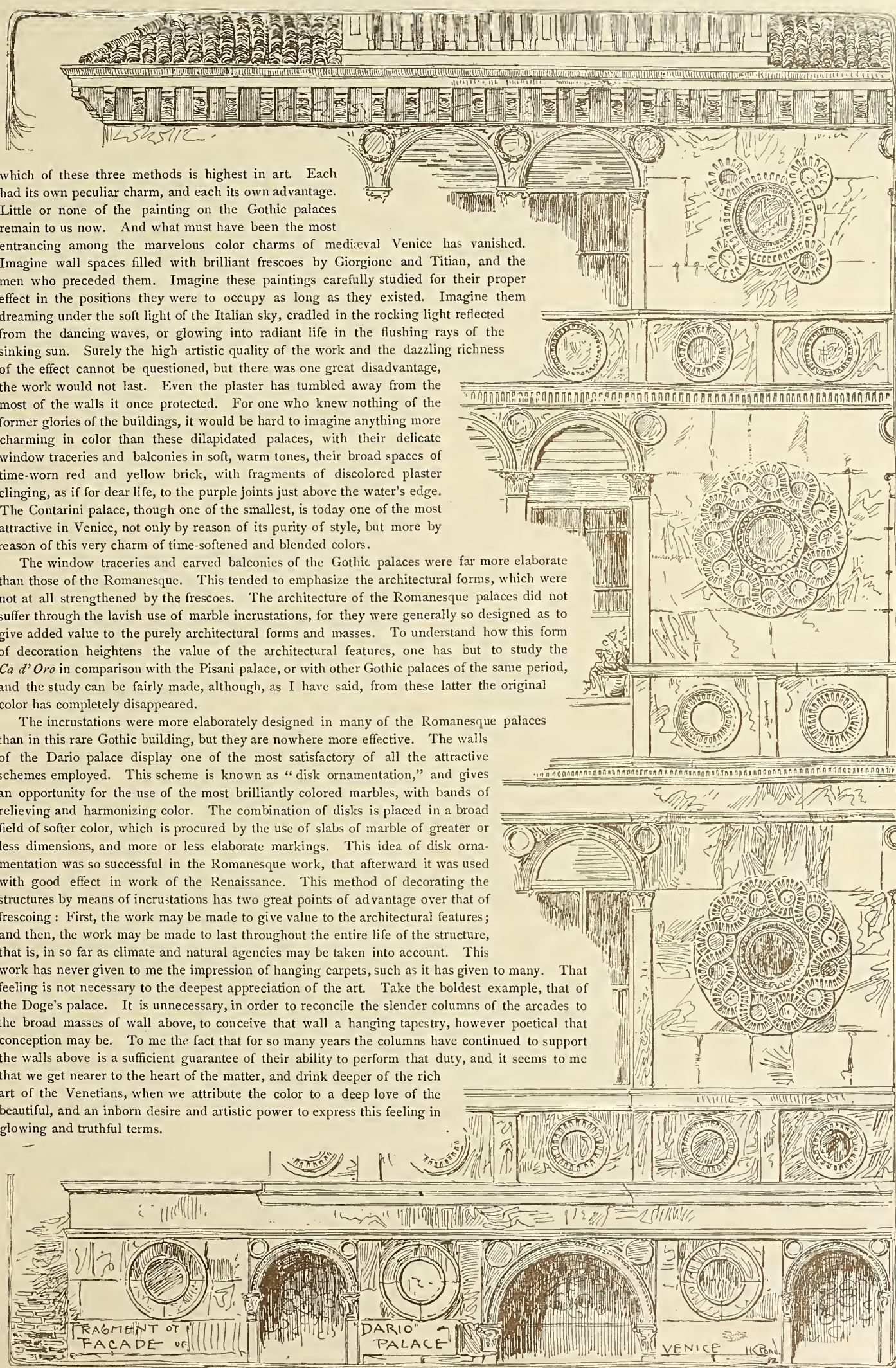
FRAGMENT OF THE
FACADE OF THE CONTARINI PALACE, VENICE

I.K. Pond

which of these three methods is highest in art. Each had its own peculiar charm, and each its own advantage. Little or none of the painting on the Gothic palaces remain to us now. And what must have been the most entrancing among the marvelous color charms of mediæval Venice has vanished. Imagine wall spaces filled with brilliant frescoes by Giorgione and Titian, and the men who preceded them. Imagine these paintings carefully studied for their proper effect in the positions they were to occupy as long as they existed. Imagine them dreaming under the soft light of the Italian sky, cradled in the rocking light reflected from the dancing waves, or glowing into radiant life in the flushing rays of the sinking sun. Surely the high artistic quality of the work and the dazzling richness of the effect cannot be questioned, but there was one great disadvantage, the work would not last. Even the plaster has tumbled away from the most of the walls it once protected. For one who knew nothing of the former glories of the buildings, it would be hard to imagine anything more charming in color than these dilapidated palaces, with their delicate window traceries and balconies in soft, warm tones, their broad spaces of time-worn red and yellow brick, with fragments of discolored plaster clinging, as if for dear life, to the purple joints just above the water's edge. The Contarini palace, though one of the smallest, is today one of the most attractive in Venice, not only by reason of its purity of style, but more by reason of this very charm of time-softened and blended colors.

The window traceries and carved balconies of the Gothic palaces were far more elaborate than those of the Romanesque. This tended to emphasize the architectural forms, which were not at all strengthened by the frescoes. The architecture of the Romanesque palaces did not suffer through the lavish use of marble incrustations, for they were generally so designed as to give added value to the purely architectural forms and masses. To understand how this form of decoration heightens the value of the architectural features, one has but to study the *Ca d'Oro* in comparison with the Pisani palace, or with other Gothic palaces of the same period, and the study can be fairly made, although, as I have said, from these latter the original color has completely disappeared.

The incrustations were more elaborately designed in many of the Romanesque palaces than in this rare Gothic building, but they are nowhere more effective. The walls of the Dario palace display one of the most satisfactory of all the attractive schemes employed. This scheme is known as "disk ornamentation," and gives an opportunity for the use of the most brilliantly colored marbles, with bands of relieving and harmonizing color. The combination of disks is placed in a broad field of softer color, which is procured by the use of slabs of marble of greater or less dimensions, and more or less elaborate markings. This idea of disk ornamentation was so successful in the Romanesque work, that afterward it was used with good effect in work of the Renaissance. This method of decorating the structures by means of incrustations has two great points of advantage over that of frescoing: First, the work may be made to give value to the architectural features; and then, the work may be made to last throughout the entire life of the structure, that is, in so far as climate and natural agencies may be taken into account. This work has never given to me the impression of hanging carpets, such as it has given to many. That feeling is not necessary to the deepest appreciation of the art. Take the boldest example, that of the Doge's palace. It is unnecessary, in order to reconcile the slender columns of the arcades to the broad masses of wall above, to conceive that wall a hanging tapestry, however poetical that conception may be. To me the fact that for so many years the columns have continued to support the walls above is a sufficient guarantee of their ability to perform that duty, and it seems to me that we get nearer to the heart of the matter, and drink deeper of the rich art of the Venetians, when we attribute the color to a deep love of the beautiful, and an inborn desire and artistic power to express this feeling in glowing and truthful terms.



Then we come to the method of decorating by Venetian mosaics of colored glass, and marble protected by glass. This method combines all the excellencies of the other two, with but one drawback; the pictorial work must be a reproduction or a translation, and not a work direct from the artist's hand. This is the work which gives the extreme beauty to the façade of St. Mark's—the work which heightens the rare charm of the interior.

I will not give further description here, for enough has been said to give abundant suggestion; but let us once more look at our own country and age. Is the time not ripe for a more general and a decidedly more artistic employment of color in our buildings, of whatever sort? We have possibilities of which the Venetians never dreamed. Chemistry and mechanics have opened up to us avenues, seemingly so broad, and leading so directly toward the goal, that it is a wonder more are not walking therein. Our architectural lines are advancing, are growing in grace, but we shall never complete our charm until we have woven about it the subtle influences of color.

On House Drainage.*

BY WILLIAM S. MACHARG, C. E.

YOUR committee has asked me to write upon a subject which has been so thoroughly discussed during the last few years that it seems as though nothing new could be said upon it. They have asked, however, more particularly for the practical conclusions which I have drawn from my own experience and consideration of the subject of house drainage, and these I give you, hoping that even if not approved by you, they may, by discussion, aid in the general advance of the character of buildings.

There is probably no country in the world in which the removal of excreta and waste from habitations, by water carriage, is so general as in our own; and from local causes, perhaps no city in this country in which it is so general as in Chicago. In consequence of conduits being required in all classes of dwellings, we have all grades of work, by far the larger part of which is imperfect.

The agitation of a dozen years ago, in regard to sewer gas as a poison and as a vehicle for disease germs, resulted in a material improvement in both design and construction of house drainage systems.

The same agitation, however, bringing forward a few persons well qualified to speak upon the subject, produced as well, in obedience to the law of supply and demand, a large number of self-styled "sanitary engineers," with "sewerage ventilation a specialty," and a great deal of queer work followed until the title became a "stink in the nostrils of the people." The return swing of the pendulum came, and, although a material gain has been made, it has become rather the thing to question the effect of sewer gas, or the possibility of the transmission of disease through sewers. A microscopist recently announced that in the examination of air from a certain sewer he found fewer micro-organisms than in the adjacent exterior air, and draws the conclusion that the air in the sewer may be the purer. This conclusion, which, under some conditions, may possibly be true, is so reported as to make it appear too general, as under some circumstances the air in a sewer may be pure poison, fatal to all animal life.

Two accidents in this city, fatal to the men employed in cleaning sewers, and unexplained, further than that instant death followed entrance into the sewers, apparently from breathing particularly poisonous gas, indicate that the gas from sewers is injurious, and it is a fair conclusion that an atmosphere contaminated with this gas, if constantly breathed, will have an effect similar to that induced by breathing air contaminated in other ways. The tone of the system is lowered, and if no disease is directly communicated, the subject becomes peculiarly liable to contract disease upon direct exposure. Consequently, it is the plain duty of those having such matters in charge, to be certain that no opportunity exists for such contamination of the air in the dwellings of the people.

Let us consider first the materials with which we are to deal, as this will enable us more intelligently to decide upon the means necessary to prevent the danger. Sewer gas is ordinarily a mechanical mixture of the various simple and compound gases, disengaged by the decomposition of the different elements of waste which are taken by water carriage from our houses. Nothing more need be said of this than that it possesses any or all the qualities of its various components, and is not a proper atmosphere.

Sewage, from which these gases arise, is the waste water from all buildings, carrying in suspension or solution all manner of waste. It may properly be divided into two classes, the waste from factories and that from houses. The first requires special treatment, and is not that which we are at present particularly considering.

The conditions in regard to house sewage are as follows: Water, as delivered to the fixtures in a house, is, or should be, pure; when used it is contaminated, and becomes at once a source of danger. Good authorities have concluded, however, that no change takes place in sewage for the space of about twenty-four hours. Decomposition does not set in at once, and hence from the flowing sewage no gases are disengaged.

In this city from the point of contamination to the outlets of the mains, the sewage which is discharged is innocuous. Where then is the danger? It is in the sewage which is held in catch-basins, in the deposit on the sides of the conduits, and in the leakage through defective joints, through which and through the floors the gases return to the houses. Exception must be made to this, of course, in the case of excreta from persons suffering from certain diseases. With this exception, if we could construct conduits which, with perfect joints, would discharge all the waste beyond the main trap on the house drainage system, we should have no contamination of the air to deal with.

This is a degree of perfection which is not to be attained at present, but modern fixtures have given us the use of water under far better conditions than obtained fifteen years ago. The effect of the water is more concentrated, and if the dilution of the other waste matter is but little higher the conduits are more thoroughly washed. These fixtures may be somewhat improved, but I think we are in a position to feel assured that a house drainage system may now be constructed which shall absolutely preclude the dangerous flow of gas into dwellings. Even with these fixtures engineers have thrown up their hands in despair and thought it advisable to return to primitive forms, because perfect cleanliness is not attained without care and attention.

My first conclusion then is this: That we shall never be able to build a drainage system in a house which will last forever, and acting automatically, run continuously without care and attention.

It is a matter of surprise to me, however, when I see how generally some such result is expected. People feel that they have not got just what they should when this machinery, in constant use, does not operate with as little trouble as the arch over their front door.

It is, however, possible to build a system of house drainage which shall perform its functions in an almost perfect manner, and to so ventilate it that the gases, forming continuously in small quantity, shall be conveyed away as formed without danger to the inmates of the house.

This construction, however, involves a radical change in the ordinary manner of grouping the work, but I do not believe that perfectly satisfactory results will be obtained until the work in a building is divided as formulated in this second conclusion, namely:

For the security of the inmates and for efficiency the whole system of waste and ventilating pipes in any building, commencing at or near the traps of the fixtures, and continuing to a point outside the walls, should be built by one person.

I know that the persons ordinarily employed in one portion of the drainage work of a house are not competent to do the class of work required in this system, and that those now doing the other portion will complain that it cuts into their trade, but the latter I do not consider necessarily true, and even if a new trade is required, the end of absolutely fixing responsibility will have been attained.

Work properly designed and constructed on this principle will furnish the person who sets the fixtures, openings behind each, outside the plaster line, for waste and ventilation, and the junction of different materials, is then at all times easy of access and examination.

Building upon this system, using material homogeneous or like, and testing before the work is concealed, the assurance may stand that the work so constructed will remain in the same condition so long as the material lasts.

This opens the final question: Of what material should such a system be built? My opinion is firm in regard to this. I have formed it from experience and general knowledge regarding water supply and sewerage; formed it professionally, and not in advocacy of any particular system, and it is intended to stand the test of time. The conclusion is this:

That the most perfect and durable system of house drainage can be most practicably and economically built, using for the portion covered with earth, cast-iron pipe, and for the portion above the ground, wrought iron pipe.

I am aware that in formulating my opinion in so broad a manner I am throwing down a gage which many will hasten to take up, and will attack the opinion; some because they honestly think it wrong; some because they think it will interfere with their business, and some because the only system in which this combination of cast and wrought iron has been extensively used is patented, and they object to the apparent monopoly.

To the last I will say that I do not think their objection good; if for no other reason than that the monopoly of a product that is held at too high a price is not profitable. To the second class argument is unavailing. To the first, those who honestly doubt, I give reason for each point in the conclusion.

The materials over which this difference of opinion arises are, of course, standard cast-iron gas pipe with lead joints or earthenware pipe with cement joints for the ground work, and wrought-iron pipe with threaded joints or cast-iron soil pipe with lead joints for the upright work.

I do not consider it impossible to do good work with earthenware or poor work with cast-iron pipe, but think more perfect work can be more easily obtained with the latter. In speaking of cast-iron pipe, I refer always to standard gas pipe.

This pipe is cast on end in lengths of twelve feet with the bell four inches deep, and thick enough to stand heavy calking; consequently there is, in straight runs, but one joint to nearly six in earthenware pipe. The joint is lead, one and a half inches deep, calked tight, not disturbed by slight movement of the pipe; the diameters of the pipes are exact, and their length insures easy lining and grading, so that we have for the sewer a perfect tube, the inner surface of which is smoother, straighter, and more evenly graded than can be obtained with the shorter lengths of earthenware pipe, and in which the joints will not be disturbed by settlement or by work which may be done near them, and hence will not open for leakage.

The risers from this drain I would make of wrought-iron pipe. This pipe, made in lengths up to eighteen or twenty feet, gives an opportunity for straight work and few joints, and these joints, the same you would use for steam or gas, are tight and cannot open; not as with cast-iron soil pipe coming where proper calking is impossible. The foregoing are the reasons why I consider this class of work the most perfect.

Persons who hold to the use of clay pipe for house drains, as an instance of its durability, are fond of referring to the many examples of pottery found in excavations of ancient cities, and even to those fragments found deep in the alluvial deposits of the Nile. Still most of the remains of ancient pottery are fragmentary, and prove only that hard burned clay resists corrosion as well or better than almost any other material. No one disputes the durability of a good quality of clay pipe, but what we require

* Paper read before the Illinois State Association of Architects, February 4, 1888.

is that the structure of which this pipe is a part should be durable, and I hold that a structure in which the materials in combination fill their places equally for a reasonable length of time, maintaining perfectly the integrity of the structure, is durable in a truer sense than one in which one or more components may fail to fill the part assigned them, from any ordinary cause, and without warning, though the remaining parts stood forever.

The durability of cast-iron pipe when used for the conveyance of sewage is very indefinite, not because of failure, but because of lack of recorded instances of failure. Both cast and wrought iron are used by engineers for the various parts of sewerage works, without hesitation, and have been so used for years. In conduits, flushing gates, pumps, we do not find it necessary to use other metal. We hear it often asserted that the gases arising from sewage will rapidly corrode iron, but the reason that iron in its various uses is not constantly giving out as it should if this were true, is probably that, as we have before seen, fresh sewage of ordinary dilution exerts no more chemical action than the water which is delivered to the house. Those who make this statement regarding cast-iron pipe systematically use cast-iron soil pipe for risers in buildings.

The use of cast-iron pipe in water supply affords us, however, data upon which we can form a sound opinion of the life of a pipe under practically the same conditions. I have seen pipe taken up in this city after twenty-seven years' use, which showed no appreciable diminution from standard thickness. This, too, was pipe laid before Angus Smith's process of coating was applied here. It is a matter of record in England that pipe which had been in use for one hundred years, upon cleaning out was found fit to continue in service. These, of course, were not coated pipe, and although Dr. Smith's process of coating pipe while hot with coal tar was not originally devised for this object, it has, doubtless, had the effect of indefinitely prolonging the life of the pipe. The resistance of this pipe to fracture is, of course, much greater than that of earthenware pipe.

As to the risers of wrought-iron pipe used in this system, coated with tar in the same manner as the cast-iron pipe, they have been applied to this purpose for about ten years, and, so far as I know, none have ever failed, nor is there any indication that they are even beginning to be injuriously affected. Their joints, as do those in the cast-iron ground work, remain perfect. I do not know of any reason for limiting the perfect action of this system to fifty years or even to one hundred years, and I think that either of these periods is sufficient to establish durability as against an earthenware sewer with cast-iron soil pipe risers. In these latter the weakest point is the joint. The bond between cement, mortar, and the hard burned or glazed surface of the pipe is very slight, and for some months there is liable to be no great strength to the mortar. The joint is, therefore, easily broken, and from the instant it is made it runs the gauntlet of men moving in the trench, of filling in the dirt, of future digging near it, and of the settlement of foundations. Any person desiring to connect another pipe makes an opening with a brick-hammer or worse tool, and if he has cement at hand, may make a fair closure of the opening; if not convenient, it is not done. I have examined so many earthenware drains, and so uniformly found them leaking or injured that I have no belief in their structural durability.

As to practicability of good construction in the proposed system there can be no question. If joints come in inconvenient places the pipe, either in the drain or risers, can generally be made up in sections and the connecting joint brought where it can be reached. Hand holes can be conveniently inserted where needed, and be perfectly closed with a cover or plug, easily removed. Under a high pressure water test, joints which may leak can be made tight under pressure, and in the wrought-iron work a joint which shows under test a very slight drop of water, if tested again after the lapse of a day or two will be found tight.

To the easy maintenance of true line and grade reference has been made.

As to economy, I do not know of any case of repairs in well-constructed work of this class. The first cost of a cast-iron drain, compared to that of an earthenware drain, bedded in concrete, if the concrete were made carefully so as to be approximately water tight, would be about equal, or perhaps slightly less. The size of the cast-iron pipe can be much smaller in the branches, as from smoothness and freedom from joints obstructions can be readily removed. The risers, being a higher grade of work than cast-iron soil pipe, would probably cost somewhat more.

To my mind the reasons given substantiate the conclusion formulated. With the minor details of such a system I will not occupy your time, except to say that I consider the feature of giving openings for the connection of fixtures at the floor or plaster line particularly good. By this means no pipe which can be punctured by nails, cut by rats, or injured by contact with mortar is concealed; the connections to the fixture can be readily detached if necessary, and the concealed pipes can be cleaned by rodding or by pressure without danger of injury. I think the general adoption of this class of work in the better class of buildings would have an excellent effect upon the general house drainage work of the city, and would assist the Board of Health in their endeavors to bring the city to a point where the ordinary sanitary condition would be such that epidemics of the diseases resulting from or aggravated by filth, could be avoided or reduced to a minimum. The danger now is greater than people generally realize, and the trouble is deep seated, and not to be reached by the spang "cleaning up," nor even by inspection, limited as it is by the expense. As a matter of fact, under most of the houses in the city exists a latent power for evil, which is liable, when its hour arrives, to exert itself to the full of its terrible might. I do not wish to be considered an alarmist, but my experience has shown me that these things are not corrected. The cure is difficult, involving much greater expense also than prevention, and the rebuilding of the same material is only postponing the evil day.

The common system of earthenware sewer, iron soil pipe, brass connections, and silver and gold plated fixtures, seems a modern realization of the image of Nebuchadnezzar's dream and the fatal weakness in both is at the bottom, for as Daniel told the king, "they shall not cleave unto one another, even as iron will not mix with miry clay." You see, therefore, we have "Scripture warrant" for our conclusion.

Illinois State Association of Architects.

THE monthly meeting of the Illinois State Association was held February 4, President Samuel A. Treat in the chair.

After the usual lunch the meeting was called to order.

There were present: Samuel A. Treat, Robert C. Berlin, J. R. Schaub, George Beaumont, C. M. Palmer, Dankmar Adler, S. M. Randolph, H. L. Gay, O. J. Pierce, Frederick Baumann, W. W. Clay, Normand S. Patton, Clarence L. Stiles, Clinton J. Warren.

On motion, the reading of the minutes was dispensed with, and the president introduced W. S. MacHarg, who, at the invitation of the Executive Committee, had prepared a paper entitled, "On House Drainage." (Mr. MacHarg's paper is printed elsewhere in this issue.)

A general discussion upon the effect of bacillus upon pipe, the qualities of lead joints, the superior quality of coal tar as a covering, etc., ensued, after which Mr. Adler moved that the thanks of the association be presented to Mr. MacHarg, and his interesting paper be published with the official proceedings of the meeting in the INLAND ARCHITECT.

The president announced that he was in receipt of the resignations of two members of the Executive Committee, Louis H. Sullivan, chairman, and John W. Root, and asked what the association wished to do in the matter.

Mr. Adler presented the following resolution:

Resolved, That this association is desirous of retaining the valuable services as members of the Executive Committee of Messrs. Sullivan and Root, and that it believes that their retirement from that committee will be detrimental to the best interests of the association, and that, therefore, the secretary be requested to transmit to these gentlemen a copy of this resolution, with a request that they reconsider the subject of this communication.

Mr. Patton: I second the resolution, as these resignations were caused by a resolution I presented at the last regular meeting, not intending to cast any reflection on those members of the Executive Committee.

The resolution was passed.

Mr. Adler stated that since the annexation of the town of Hyde Park, and other towns, to the city of Chicago, many complications in the erection of buildings had arisen, in regard to the inadequate building ordinance of the city. While the extension of the fire limits might work a hardship to the new districts, still it was unjust to those living in the city to be compelled to erect brick structures, while miles of frame buildings were being erected, forming a cordon around the city proper and a constant menace to it; and for this reason a new or revised building ordinance should be passed at once. While the Illinois State Association could not make the law, it should emanate from that body, and it would be well to secure a consultation with the different officials interested. Mr. Adler believed that certain limitations and restrictions should be made. For instance, while the extension of the fire limits to cover what is now miles of prairie might retard building, it might provide that frame buildings could be erected until one half of a street or a section had been built up, and then the territory could come under the fire ordinance.

Mr. Baumann stated that he was chairman of a committee appointed to assist Commissioner Edbrooke in formulating a new building ordinance. The following resolution was presented by Mr. Adler:

Resolved, That the subject of the revision of the building ordinance, of this city, be made the special order of business of a special meeting of this association, to be held February 18, at 1 o'clock, and that the secretary be instructed to inform the commissioner of buildings, the fire marshal, the board of underwriters and the real estate board, and invite them to participate in its deliberations.

Resolved, Also, that a lunch be served at said meeting.

The discussion which ensued showed that the members were largely in favor of active work in the direction of a correct building ordinance.

The meeting then adjourned to February 18, at 1 o'clock.

Chicago Real Estate Board.

THE fifth annual banquet of the Chicago Real Estate Board was given at the Grand Pacific Hotel, February 2.

The banquets of the board have become not only locally celebrated, but their fame in the way of elaborate menus and able speeches has gone abroad, so that this banquet was attended by many honored guests from other cities.

The menu was one of the best ever spread upon the tables of the Grand Pacific from its exceptionally fine cuisine. The entire arrangements were in charge of William J. Pierce, of the firm of Pierce & Ware, and were pronounced not only perfect in arrangement, but full of pleasing surprises.

Many visitors from other cities were present, among them being: Alexander D. Porter, of Boston, and Colonel John J. Priest and Edward S. Rouse, of St. Louis. In the afternoon these gentlemen were given a lunch at the Union League Club, and were otherwise entertained. The guests' table, at which were also seated the president of the Board, Henry L. Turner, Edward A. G. Goodrich, James P. Root, ex-United States Senator James R. Doolittle, Mayor Roche, Judge Gresham, ex-Governor J. M. Hamilton, Rev. M. Wolsey Striker, Lumley Iglehart, F. G. Gunther, W. D. Kerfoot, Martin J. Russell and Lyman Baird.

The table before these guests was decorated with cottages, with banks of flowers surrounding them, among the petals of which projected tiny electric lights, fed from a storage battery beneath the table, the effect being most unique and brilliant.

After discussing the excellent menu, President Turner arose and said: Since during my absence you conferred upon me the presidency, it is, perhaps, only fitting that I should say a few words of personal thanks, but had I been present that day I should have advised another choice.

President Turner then in his inimitable way made an address of welcome, in which he said:

As there is no pleasure more perfect, more undefiled than that where friends gather about a bounteous board, so there is no sweeter grace than that of hospitality—a benediction to the guest, a blessing to the giver. It becomes my pleasant duty to welcome to our midst a number of sister cities. We are glad, friends, glad to meet you. All that we have is yours. We are a modest city. We have not much of which to boast in

presence of those who are so much richer in the good things a city loves than we. We have no ancient Boston Common, but we have a paleozoic common boss town government. We have no musical infant prodigy, but we have that prodigious infant, Frank Collier, who sang his love-songs to the queen. We have no Astors, Goulds, and Vanderbilts, but we have a common council with very wealthy tastes. We have no Anthony Comstock, but we have acres of nudity. We have no Coaching Club, but we have a gorgeous Black Maria. We have no "Dear Bunnie," but any of us can handle the kiss-me-quick.

We have no *Philadelphia Ledger* with its sweet mortuary poetry, but we have a Robert Givins who can sing a lot buyer blind in half a second.

Said a burglar to his pal:

"Hello, Jim; how you gittin' on!"

"Tip-top."

"What'd yer crack last?"

"A real estate agent's."

"Git any swag?"

"You bet."

"What'd yer git?"

"Got away 'thout buyin' a house an' lot."

If that burglar had chanced to strike Bob Givins he'd a bought a whole auction and been converted before he got away.

We have no Fairmount Park or Wissahickon, but we've a Yerkes, and he's a slick 'un.

"I move," said an Irish alderman, on his return from Venice, "that yer honorable body import twelve gondolas fur the park."

"I move to amind," said his economical colleague, "that we buy wan male and wan faymale and trust to nature for the rist." Lord, gentlemen, if we could only import a female Yerkes what a stunning city we should have.

We have no monuments like Baltimore, but we have some elegant sites and 800,000 people to look at them. We have no base ball club as Detroit has, but we have a beautiful uniform. No bridge as has St. Louis, but we have a Bridgeport, whose mighty stench could bear an army o'er the Hellespont. We have, too, our board, the great Chicago Real Estate Trust—a trust that's never been bet-ayed, never been broken or dishonored, for there's more money in the keeping of it than is ever in its breaches (breaches).

We are, you see, a strange, a wondrous city. Fire cannot destroy, nor riots terrify us. And even should Lake Michigan arise in anger and strive to drown us with a tidal wave, we'd take the advice of the Irish water clerk to the Irish woman who complained that the water-pipes had "boorst and drowned all her chickens":

"Dahm it! why don't you kape dooks, thin?"

But such as we are you're welcome in our midst. Welcome, welcome one and all! We're glad to have you here, and glad that you should see how glad we are.

The speeches of the evening were as follows:

Ex-Senator Doolittle responded to the toast, "Homestead Exemption from Taxation, and a Double Vote for the Occupant of a Homestead."

James P. Root talked about "Early Reminiscences" and told some funny stories. He said his talk might better have been on "Early Land-marks." Mr. Root said, among other things:

One would naturally suppose that the Committee of Arrangements believed me to be an early reminiscence, or, in other words, that I am one of the oldest citizens. I am. The committee was right, for I saw Chicago before half of you present were born. In the spring of 1837 I rode all the way from central New York to this city in a wagon. I remember seeing some cattle grazing in the sloughs about where the Grand Pacific Hotel now is, and I asked my mother if they were buffalo. Chicago was then a nondescript. It had no pavements, no parks, no boulevards, no theaters, no board of trade, and no real estate board, though everyone who had a lot to sell boarded every new comer, if he could find a board to float on. There was no harbor, and steamers anchored out in the lake.

Robert C. Givins is the humorist of the board. There was nothing humorous in his subject—"Ownership of Land as an Antidote for Communism"—but he made a speech that was full of hard sense, mingled with much that was humorous.

Martin J. Russell, editor of the *Herald*, responded to a toast, "The Press."

To the toast, "The State of Illinois," ex-Governor John M. Hamilton responded.

President Turner, in introducing Mr. Alexander S. Porter, of Boston, humorously alluded to "Hub" culture, and added that Mr. Porter would probably speak in Hebrew, but a Chicago real-estate man could easily understand it if there was any business in it.

The Weber Quartet sang two songs, which were well received, and Mr. Edward S. Rouse was introduced, a modest gentleman from the modest town of St. Louis. Mr. Rouse brought many facts to show that the progress of his city toward first place among the cities of the West was but beginning. The Weber Quartet sang a song full of local hits, entitled "Nineteen Hundred and Nine." Few local dealers escaped being punctured, and encore followed encore for many minutes.

Decidedly the feature of the evening was the unique menu, which was the creation of the genial chairman of the banquet committee, Mr. Pierce. This was a copy of the regular warranty deed, red ribbon, seal and all, and gave to the guests the menu and the toasts "to have and to hold." It was handsomely printed on parchment, and will be treasured by the guests as a memento of the board's fifth annual banquet.

Chicago Art Institute Exhibition.

THE Chicago Art Institute announces that works for the first annual exhibition of American art, opening May 26, will be received at the Art Institute, corner Michigan avenue and Van Buren street, until May 22. The list of works for exhibition should be written with all the required particulars on the annexed blank, and be sent to the secretary at the Art Institute by or before May 12. The Institute will bear all expense of transportation, and will pay the insurance premiums, asking that contributors name a moderate sum that will reimburse them in case of loss by fire. The secretary will have charge of the sales, upon which no commission will be charged. The public exhibition will begin Saturday, May 25, and close Saturday, June 30. Mr. J. W. Ellsworth has provided for an annual prize of \$300, to be awarded at the annual exhibitions to the best oil painting by any living American citizen, and not previously exhibited in Chicago or vicinity—no competitor to take the prize the second time. The Art Institute has provided for a second prize of \$250, to be awarded the next best oil painting by any living American citizen, not previously exhibited in Chicago or vicinity. The awards will be made by a committee of three, composed of Mr. Thomas B. Clarke, of New York; Professor Halsey C. Ives, of St. Louis, and Mr. C. L. Hutchinson, of Chicago, during the third week of the exhibition.

The value of the Art Institute as an art educator is constantly increasing, and the promoters are reaping a rich harvest for their laudable labors.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1888. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Houston on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1888. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. W. G. Williamson, secretary. Annual meeting, November 5, 1888.

CHICAGO CARPENTERS' AND BUILDERS' ASSOCIATION.

The annual meeting of the Carpenters' and Builders' Association, of Chicago, was held at the Builders' and Traders' Exchange, January 26, the meeting being adjourned from January 12 on account of the inclement weather preventing a full attendance at that time.

The meeting was called to order by Vice-President William Hearson, James John, secretary of the Exchange, acting as secretary.

The secretary reported a new membership of seventy-five, and the association finds, from annual dues, etc., in hand, \$600.

After considerable discussion regarding the proper interpretation of the by-laws relating to the suspension of members for non-payment of dues, the matter was settled by the passage of a resolution calling for the suspension of all members \$10 or more in arrears.

Four firms were reported suspended under the rule: Scheler & Stafford, F. D. Reynolds, Kohl & Kievlan, and Dixon & Peterson. C. G. Dixon, of this firm, is a Knight of Labor, and represented the "labor" party in the last state legislature.

A communication was received from Wm. Grace, who has been president of the association for the past year, but absent from the city almost the entire time. It was received and placed on file.

The election of officers resulted in the following for the ensuing year: President, William Hearson; vice-president, J. W. Woodard; secretary, James John; treasurer, Peter Kauff; directors, for two years, William Mavor, W. E. Frost and Samuel H. Dempsey; for one year, William Goldie.

In the election the desire of the association was to elect James John, secretary of the Exchange, secretary of the association. As he was not a member, a unanimous vote was passed making him an honorary member as long as he filled the office of secretary, after which he was elected.

In the re-election of the treasurer, Peter Kauff, the unanimous vote testified the association's confidence in that gentleman, who has filled that office of trust each year successively since the association's organization.

In voting for directors, the vote for the one year term tied between Francisco Blair and William Goldie, and Mr. Blair moved that Mr. Goldie's election be made unanimous, which was done.

The following addition to section 8 of the by-laws was presented, to be voted upon at the next regular meeting:

A committee of three members of the board of directors shall be appointed by the president to serve during the year, and audit the accounts of the secretary and treasurer at each annual meeting, and, if found correct, to sign their names to their annual report.

Several letters were received from different bodies of carpenters, asking for a committee of conference in regard to the work of the coming season. These were referred to the next regular meeting, February 9.

NEW YORK CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

At the annual meeting of the chapter, January 1, reports were received from Napoleon Le Brun, chairman of Committee on Examinations in connection with the city fire department, the Library Committee and the Executive Committee.

The following officers were elected for the ensuing year: President, E. H. Kendall; first vice-president, Geo. B. Post; second vice-president, C. W. Clinton; secretary and treasurer, A. J. Bloor; executive committee, N. Le Brun, F. A. Wright and *ex-officio* the president and secretary. Committee on Library and Publications: James E. Ware, Theo de Lemos and H. O. Avery. Committee on Examinations: N. Le Brun, R. M. Upjohn and R. M. Hunt.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The usual fortnightly meeting of this association was held, January 11, in the Architectural Hall, 42 George street, the president, Mr. Hippolyte G. Blanc, in the chair.

After the usual preliminary business, a lecture on certain Scottish castles not described in the recent work on the castelated and domestic architecture of Scotland, was delivered by Mr. Ross, architect. The lecture was illustrated by upward of two hundred drawings, including castles in all parts of the country, particularly in the west and southwest, such as Skipness, Loch Ranza, Portincross, Kilburn, Mugdock, Dunheath, Bardowie, and other castles on the Clyde and in the neighborhood of Glasgow. Skipness was described as being one of the most splendid specimens of military architecture in Scotland, and in a most perfect state of preservation, although dating from the thirteenth century. Certain minor castles on the Clyde, such as Little Cumbrae, Fairlie, Skelmorlie Law, had, it was pointed out, a great resemblance to each other both in size and appearance, some of their dimensions being identical, but their most marked similarity consisted in their internal arrangements of hall and kitchen, which characterized them as a group of buildings peculiar to the district. The more important castles in Ayrshire and Galloway, such as Loch Doon, Irvine, Penkill, Dalquhanan, Closeburn, Mochum, Dunskey, Rusco, Loch Naw, Kenmure and Hills were illustrated. Special attention was directed to Loch Doon castle, which stands on a small island at the southern end of the loch. The castle is nearly circular in plan, consisting of eleven sides, the south side being about twice the length of any of the others. The whole is in a most appalling state of ruin, it having lately been attempted to bring down the south wall by removing the lower courses of masonry. The castle is of great age, probably dating from the thirteenth century, and merely as a picturesque feature in a wild and bleak district, and altogether apart from its historical associations, it is worthy of better treatment. Mochum, which has lately been restored by the Marquis of Bute, was referred to as a remarkable building, consisting of two distinct castles, separated from each other by about twenty feet, connected by a high wall. Along the eastern borders Cessford, one of the most massive piles in Scotland, was fully described, as well as Little Dean, Hutton, Innerwick, Lethington and Merchiston, the two latter being most interesting in themselves, having several architectural points of resemblance, and both having been the homes of celebrated men. Queen Mary's house in Gedburgh, Kirkhope and Oakwood towers, with various castles along the Firth, such as Blackness, Langapaus, Budge Castle and Bonhard were included among examples, while in Fife and Forfarshire, and as far north as Ackergill in Caithness, many examples were illustrated. As regards Queen Mary's house, the lecturer was of opinion, notwithstanding the doubts which have been expressed to the contrary by various writers, that it was within the bounds of possibility that the house was as old as the time of the unfortunate queen.

At the close a hearty vote of thanks was accorded to Mr. Ross for his paper.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.

The annual meeting of the Western Pennsylvania State Association was held at Pittsburgh, January 17.

The following officers were elected: President, Andrew Peebles; vice-president, George S. Orth; secretary, L. O. Dance; treasurer, Joseph Anglin; board of directors, Thos. M. Boyd, Joseph Stillburg and T. D. Evans.

The Western Pennsylvania State Association was started as a local organization at Pittsburgh, in February, 1886, and includes among its members most of the practicing architects of that city. The association has adopted the schedule of charges of the national associations, but have taken no steps toward affiliation, deeming it proper to regulate local affairs before seeking representation in the national body.

CHICAGO BRICKLAYERS' UNION.

At a meeting of the Bricklayers' Union, held in Greenebaum's Hall, January 20, the following Committee on Arbitration was elected for the ensuing year: Albert Vorkeller, president, Albert Buttan, Charles Householder, E. Goodwin and Thomas McNichols. Architect Donnellan, who prepared the plans for the proposed new quarters of the union at the corner of Peoria and Monroe streets, presented his bill for \$1,000, which he claims has been due for a year. A committee was appointed to consider the figures and report at the next meeting.

Our Illustrations.

Residence; Frank L. Wright, architect, Chicago.

Residence for Robert Gillham; A. Van Brunt, architect, Kansas City.

Tenement block for James Lovett, Omaha, Neb.; Sidney Smith, architect.

The Chronicle Building, San Francisco, Cal., Publication office of the *Chronicle*.

Store and office building, Kansas City, Mo.; James & James, architects, Kansas City.

State Experimental Farm School; L. S. Buffington, architect, Minneapolis, Minn.

Residence for Mrs. V. C. Thompson, Dearborn avenue and Delaware place, Chicago; Cobb & Frost, architects.

House for Chas. T. Clark, St. Louis, Mo.; Wm. S. Eames, and Th. C. Young, architects. Built of brick and Lake Superior sandstone, roof, red slate; cost about \$14,000.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence of S. B. Dixon, Detroit, Mich.; Mason & Rice, architects.

Residence for E. W. Bangs, 469 N. State street, Chicago; Cobb & Frost, architects.

Residences, Reading road, near Oak street, Cincinnati, Ohio; Jas. W. McLaughlin, architect.

Residence for O. R. Keith, Prairie avenue, near Eighteenth street, Chicago; Cobb & Frost, architects.

Residence of J. J. Glessner, corner Prairie avenue and Eighteenth street, Chicago; H. H. Richardson, architect.

In our photogravure edition for August, 1887, we issued a plate of the residence of Judge Brown, Detroit, Mich., without giving the architect's name. We have since learned that Mr. William H. Miller, of Ithaca, New York, was the architect.

New Publications.

ELEMENTARY GRAPHIC STATICS AND THE CONSTRUCTION OF ROOF TRUSSES. By N. CLIFFORD RICKER. New York: Wm. T. Comstock.

This work has been before the public for a year or more; time enough has elapsed to enable one to pass on its merits. This we propose to do.

In judging properly of a work it is necessary to know for whom it is intended, whether for students or for practical men, that is, for those engaged in business. Students at schools or colleges usually take up a book and go regularly through it, studying it day by day, so that they have the connection of things in their head, and recollect the meaning of the symbols, etc. The practicing architect may use a book once and then not look, or need to look, at it for a year. When he does look at it he is, perhaps, in a hurry to find some particular thing or rule, divested of all extraneous matter and clearly applicable to the question in hand. The meaning of the symbols should be readily found and clearly and definitely defined, so that he who runs may read, and clearly understand, without shadow of doubt.

Though this book is intended for students, it will also be found useful to the practicing architect, much more so than might first be supposed.

The first portion of the work is taken up with the elements of graphical statics, which are given without any particular novelty, though expressed in a clear manner. The moment of inertia is treated of, and made as clear, if not clearer, than is usual. It is difficult for most people to grasp the idea as to what the moment of inertia is. However, it is not necessary to fully comprehend its import in order to use it for the solution of problems. The area of the inertia figure is recommended to be found by a planimeter, or by abscissas. A planimeter is scarcely ever to be found in an architect's office. A good way is to reduce the figure to an equivalent triangle, as mentioned in Trautwine's Pocket Book, but better described in Gillespie's Surveying.

The slopes of roofs are given by angles only. Protractors are not often used by architects. The slopes of roofs are always, or nearly always, given by their run and rise. It would have been well to have done so here, and better to have given both ways.

The method of moments is made very plain. It might be better, perhaps, if the figure of the trusses were given whole, on a larger scale, instead of separate drawings being made of the joints, but this is not important.

It would have been better to have used + to denote compression, and — to denote tension, as done by Stoney & Dubois, instead of the reverse. Because in practice compression members are often made of cruciform shape, and tension members of a rod (or tie). Similarity of shape helps the memory. Indeed, to a practical man it seems incongruous to use the shape of one section to denote where a different (or what might be called the reverse) shaped section is required.

Bow's notation, modified, is stated to be the best and most simple. To this we must most emphatically dissent. Bow's notation pure and simple is much the best. There is not a single figure in the whole book where it could not have been used, and where its use would not have been an improvement. It makes but little difference to an expert what notation is used, but to a student or one who uses a book or rule occasionally, it makes a great difference whether the notation can be readily understood and used or not. For most uses, we have never seen any notation equal to Bow's; it is both readily understood and used. Indeed, the difficulty with it would be to go astray. It can be applied to the most simple, as well as the most complex figure.

Problems are given with irregular loads on only the upper chord of trusses. Uniform vertical loads only are given for lower chord. The loads

on lower chord, as well as those on upper chord, may be irregular, both in amounts and in directions, no two of them being the same in any respect. A novice might, perhaps, presume otherwise.

In treating of what is termed the Fink truss, a truss where three unknown strains come together at one joint, a solution of the problem is given only for equal vertical loads at all the joints, the same as in all books we have ever seen on the subject. Yet it is not at all necessary that the loads should be similar either in amounts or directions in order that the problem may be solved graphically. We may, perhaps, treat of this further hereafter.

A chapter on the length of truss members gives trigonometrical rules by which the lengths of the members of many various forms of trusses can be calculated. This is a novel feature and may be a useful one. The actual lengths are generally found from the rise and run given on the drawings, by laying out the work in the workshop on a large scale, the full size if possible. This way will no doubt be followed when practicable, nevertheless it is well to have such rules as are given so that they can be used when needed.

A number of formulæ are given, without demonstration or examples, which was to be expected from the title of the book. Although there is nothing peculiarly original about the formulæ themselves, yet we know of no such compact and useful collection of formulæ elsewhere. They are not the least merit of the work.

There is a table of average coefficients of materials given. The authorities therefor are not given. They do not agree in many cases with authors like Hatfield. However, we know that authorities differ, and we do not suppose that they lack justification.

A chapter is given on the determination of dimensions of truss members. The arrangement of the formulæ is well adapted to the use of logarithms, and this we personally prefer, though we do not feel sure that most architects would do so. However, logarithms need not necessarily be used.

The chapter on detail of truss joints is also instructive although there are some things given about which we do not agree. In this chapter a statement is made that good brick masonry will safely resist a pressure of eight tons per square foot. What is meant is that brick masonry immediately under the truss will do so, and this is true. Whether a brick pier would carry that amount or not would depend on the height of the pier.

Wooden tenons are shown in some of the joint drawings. It would be better as well as cheaper to omit them. If anything of the kind is needed a spike or two will answer. A better fit can be made without the tenon than with it, and the wood around the mortise is not so likely to crush by pressure. The foot of the truss is bolted. It should be strapped. No reliance can be placed on what is called the resistance of indent to shearing. We have often seen the piece between indent and end of tie, split off before the truss members were put together. A bolster should be put at the foot of all large trusses.

The index is very lean. It might and should have been much fuller. There are also some typographical errors that should have been corrected.

We have taken a rapid glance through the work and noted our ideas thereon. We have tried to be candid, free and impartial in our criticisms, the more so as we believe that we appreciate its great merits. It is the only work that we know of that sets out the subject of graphical statics and truss work in a clear, lucid, and, so to speak, workable, manner to a noteworthy degree. Although it is primarily intended for students, all architects who take an intelligent interest in their profession should read it.

CATALOGUE No. 8, issued by William Willer, of Fourth and Cedar streets, Milwaukee, Wis., has been received. The edition is for 1888, and entitled the "Architects' and Builders' Edition." It illustrates and exemplifies the rapidly getting to be very popular Willer inside blind and screen, in a thorough and intelligible manner. To most architects and builders this unique style of window blind is familiar, and requires no description to make them acquainted with its merits. To those who have neither used or seen them it would be advisable to acquaint themselves with the claims of this blind and screen, and they may become satisfied they have found a good thing for their clients. A request to Mr. Willer will result in the receipt of this latest and revised catalogue and price list. We learn a large number of the architectural profession have given the Willer blind their indorsement by utilizing it in their work.

THE illustrated catalogue for 1888, of Messrs. Samuel H. French & Co., of Philadelphia, Pa., manufacturers and importers of builders' supplies, is received. It is a handsomely printed octavo book of over two hundred pages, containing more than four hundred artistically designed engravings, showing samples of their specialties in center pieces, brackets, column caps, corbels, keystones, cornices, frieze work, corner pieces, enrichments, mantels, grates, etc., Architects and builders will find the firm's catalogue for this year a great improvement over those of previous years, and, no doubt, may find many suggestions in its pages, as well as material adapted to much of their work. In a word, it is a good thing to have in an architect's and builder's office.

THE receipt is acknowledged of a fine catalogue just issued by E. C. Stearns & Co., Syracuse, N. Y. The book is handsomely bound, containing an unusually large and attractive list of door hangers, screen frames, clamps, vises, augers, and other hardware specialties manufactured by them.

AN important tablet of polished brass has been executed by Messrs. J. & R. Lamb, of New York, from design furnished by Mr. James G. Cutler, architect, of Rochester, for the Dean Richmond Memorial Library at Batavia, N. Y. It is oblong in shape and fits into the woodwork over the fireplace. The upper part is engraved with a rich band of ornamentation, in the central part of which is introduced the monogram of young Mr. Richmond, and below this the inscription, reading as follows: "This building erected A.D. 1887, as a memorial of Dean Richmond, Jr., by his mother, Mary E. Richmond." The lettering and ornament are deeply engraved and filled with colored enamels, and the work in position is very effective.

Mosaics.

THE Exposition building at Oshkosh, Wisconsin, a huge frame structure, was crushed in by the weight of snow.

THE Byrket-Hall Sheathing Lath Company, of Indianapolis, has opened a Chicago office at 28 Maller's building where samples of that material may be examined.

UNDER the style of George C. Mason & Son, architects, George C. Mason, Jr., of Newport, for three years secretary of the American Institute, has opened a branch office in Philadelphia. Mr. Mason senior commenced the practice of architecture at Newport in 1858.

THE Grant Monument Association, of New York, has issued a circular, addressed to artists, architects and sculptors, inviting competitive designs for a monument to be erected over General Grant's grave, to cost \$500,000. Prizes of \$1,500, \$1,000, \$500, \$300 and \$200 are offered. Information as to the rules governing the competition can be had by application to Richard T. Greener, secretary, 146 Broadway, New York.

MESSRS. PIERCE, BUTLER & PIERCE, of Syracuse, New York, manufacturers of the Florida steam and hot water heaters, have recently purchased a large foundry and machine shops at Geneva, New York, and have doubled the former capacity of their works. Their trade through the popularity of their heaters has spread from throughout the United States to Canada and England, and the increased capacity of their works was demanded by the rapid increase in sales during the past year.

It is a well-known fact that our architects many times pay too little attention to the beautiful effects so easily obtained by the use of beveled glass and mirrors. In the way of decoration one can hardly imagine a more pleasing display of talent in this line than that in the vestibule and foyer of the new Haymarket theater (Flanders & Zimmerman, architects) executed by Mr. J. D. Roberts, 39 South Canal street, Chicago. All work from this factory is done under the personal supervision of Mr. Roberts, which fact accounts for the superior workmanship exhibited. Too much care cannot be taken in the selection of fine glass, and our architects would be well remunerated for a little time spent in looking at some of the excellent work of the above-named firm.

THE reception room of Mr. Joseph Twyman, illustrated in this number, is one of the five he now occupies as office, studio and workshops, in the McVicker Theater building. Mr. Twyman is well known as the color decorator of McVicker's Theater, acknowledged to be unexcelled by any playhouse in this country. The Fourth Presbyterian Church, corner of Rush and Superior streets, is a recent example of his work, into which he has introduced beautiful and novel treatments, conspicuously the two large stained glass windows in the transept. He is also the decorator of the Hotel Richelieu, which contains some of the handsomest interiors of any hotel outside of New York. Mr. Twyman has been prominent in his profession for many years as a leading spirit, not only in Chicago but in the entire Northwest, and has opened studios to do frescoing, papering, painting, stained glass, and a general decorating business. His success is already assured.

Obituary.

ARCHITECT WILLIAM M. BEATTIE died at Waco, Texas, February 5. He was formerly a resident of St. Louis, where his father, J. Beattie, is a prominent architect.

Railroad Notes.

"THE Burlington's No. One" is the quickest train from Chicago to Omaha and Denver. It has not missed being on time yet. For tickets apply at Palmer House, Grand Pacific Hotel, Union Depot, or at the Chicago, Burlington & Quincy city ticket office, No. 211 Clark street.

THE Chicago & Grand Trunk railway is very highly complimented by those who have tried the new cars. In fact, it is said that the new Pullman sleeping cars, specially constructed for the line, exceed in elegance and appointment any ever turned out of Pullman. Travelers seeking the most comfort for their money are sure to be satisfied.

THE great Rock Island offers choice of routes, either via Union Pacific, D. & R. G., A. T. & S. F., or Missouri Pacific, from the Missouri river. Rates as low as the lowest. Round-trip tickets on sale at frequent intervals. For tickets, sleeping-car berths, and full particulars call at ticket office, 104 Clark street, Grand Pacific Hotel, Palmer House, or depots on Van Buren and Clark and Twenty-second streets.

It may not be generally known that while the price of the celebrated California excursions has been advanced \$20 by other lines, the Missouri Pacific is still selling round-trip tickets from Kansas City to Los Angeles, San Diego and San Francisco at the old rates of \$60 from Kansas City, \$72 from St. Louis, and corresponding prices from other points. These tickets are good for six months, with liberal provisions for stop-overs, for returning by different routes, and for extensions and side trips. The line runs through the charming Indian Territory and the state of Texas to El Paso, thence by the Southern Pacific, and is wholly free from storms and snow blockades. It is, therefore, a favorite with invalids. The next excursion train leaves Kansas City on the morning of February 17, 1888, or St. Louis by the Iron Mountain route, February 16, 1888. The Missouri Pacific and the Iron Mountain Railways are also selling excursions to all points in Texas at one fare for the round trip. Tickets good sixty days, with stop-over privileges both going and returning. For further information address H. C. Townsend, general passenger agent, 102 North Fourth street, St. Louis.

UTICA, Ill., on the "Great Rock Island Route," is the center of a very rich farming country, making it a good grain market. The same prices are paid as in the largest cities for all kinds of grain. A half million bushels of grain are shipped from the two large elevators here every year. The principal manufactories are the Sewer Pipe & Terra-Cotta Works, the

Fire Brick Works and the Cement Works. The pottery which is now building is an important step in the business interests of the town. Clay particularly adapted for making jugs, jars and all kinds of stoneware is abundant. The public schools are up to the standard in efficiency. A fine brick school building was built two years ago at a cost of \$5,000. It is two stories high, has basement, and contains six rooms with a capacity of seating 300 pupils. The scenery around Utica is magnificent. The town is situated in the valley of the Illinois river and to the north and south the thickly wooded cliffs tower up to a height of 150 feet. The famous pleasure resorts, Starved Rock and Deer Park, are near, Starved Rock being just across the river and a few rods east, and Deer Park about three miles south. Thousands of people from all parts of the country visit these places every month.

The latest addition by the Chicago & North-Western railway to its already admirable train service is its new train between Chicago and Council Bluffs, which, on account of its quickened movement and the very advantageous connections which it forms for the Pacific coast, has been christened the "Overland Express." The make-up and movement of this train have been arranged with studious care to afford the greatest convenience and best service to the patrons of the North-Western. It is completely equipped with palace cars, in which are found all the most recent and approved devices for comfortable and even luxurious travel—supplemented by the perfect service for which the Chicago & North-Western dining-cars have established a national reputation. Commencing Sunday, December 18, it leaves Chicago daily at 7:30 P.M., and arrives at the Missouri river before the following noon, connecting with the fastest trains of the Union and Central Pacific railways for Denver and the coast (upon which new through sleepers are carried from the Missouri river to San Francisco and Los Angeles) greatly reducing the time of transit from Chicago to Denver and all Colorado and Pacific coast points. For information, time tables, and sleeping-car reservations apply at the ticket offices of the Chicago & North-Western railway, No. 62 Clark street, Palmer House, Grand Pacific Hotel, and passenger station, corner Wells and Kinzie streets.

Synopsis of Building News.

Aberdeen, Dak.—Architect O. C. Jewett reports: For J. S. Hazelton, hotel building, to cost \$22,000.

Augusta, Ark.—Architect B. J. Bartlett, of Little Rock, reports: For S. L. Ingalls, two-story frame residence, 50 by 62 feet; cost \$2,500.

Bloomington, Ill.—Architect W. H. Milner reports: Outlook fair. Two pretty nice church buildings are projected for this summer, and competitive drawings are now in hands of the judges. One is for the Baptist and one for the Methodist society. For Jas. Larkin, frame residence, 34 by 48 feet; cost \$3,000; projected. For J. R. Mason, addition to residence, 20 by 24 feet; cost 2,000; projected. For Grace M. E. Church, church building, 75 by 110 feet; cost \$20,000; projected. For O. F. Reeves, remodeling residence; cost \$3,000. For Dr. Crothers, remodeling residence; cost \$2,500; projected.

Breda, Iowa.—Architect M. Schnell, of La Salle, Ill., reports: For Rev. C. L. Schulte, brick and stone church, 56 by 140 feet; cost \$24,000.

Brookings, Dak.—Architects Lee & Roth, of Fort Smith, Ark., report: For L. Foster, frame dwelling, 30 by 45 feet; cost \$3,500; projected.

Canon City, Col.—Outlook good. There is considerable work in the way of small houses, repairing, etc., being done. The A. T. & S. F. R. R. is now running trains into this city.

Architect G. W. Roe reports: For the School Board, three-story stone addition, 77 by 48 feet, to the public school building. It is of modern design with an elaborate tower; cost \$16,000; projected; plans completed. For Canon City Coal Co., ten houses, 26 by 32 feet; cost \$900 each. Also coal breaker, elevator house, weigh-house, etc.; cost \$5,000. Boiler and engine house, 49 by 65 feet; cost \$1,600. Carpenter and blacksmith shop, 30 by 60 feet; cost \$1,200. All under way; Roe & McGrath, builders.

Centralia, Ill.—Architect W. H. Milner, of Bloomington, reports: Old National Bank, bank building, 27 by 60 feet; cost \$10,000; under way; W. B. White, builder.

Chicago, Ill.—Architect W. Ohlhaber reports: For Wm. Miller, three-story flats, 22 by 68 feet; cost \$6,000.

Architect A. F. Boos reports: For Geo. Schmoll, three-story stores and flats, 20 by 70 feet; cost \$10,000. For Jacob Becker, three-story flats, 41 by 49 feet; cost \$7,000. For John Schirra, three-story stores and flats, 25 by 78 feet; cost \$12,000. For A. F. Boos, three-story flats, 40 by 60 feet; cost \$8,000.

Architect J. L. Merriam reports: For D. H. Small, six two-story dwellings, 22 by 50 feet; cost \$24,000. For George Wilson, two-story residence, 25 by 42 feet; cost \$4,000.

Architect Thos. Wing reports: For J. F. Whiting, three-story residence, 22 by 65 feet; cost \$9,000.

Architect C. E. Lohman reports: For Chas. Oberg, four-story flat building, 22 by 65 feet; cost \$6,000.

Architect C. H. Gottig reports: For Chas. Gottschalk, five-story malt house on West Division street. For the Brand Brewing Company, an ice house to cost \$25,000. For John Swenson, three-story store and flat building; cost \$15,000.

Architects Ostling Bros. report: For C. F. Blomstrom, three-story flat building, 50 by 80 feet; cost \$16,000.

Architect Fred W. Wolf reports: For F. J. Dewes, additions and alterations to brew houses; cost \$25,000.

Architects M. F. McCarthy & Co. report: For Charles Fry, seven-story apartment building, 56 by 161 feet, pressed brick, Wisconsin granite trimmings; cost \$160,000; to be commenced at once.

Architect August Bessler reports: For H. Ahlgrim, three-story store, flats and hall, 25 by 85 feet; cost \$10,000. For Wm. Beck, three-story flat building, 50 by 100 feet; cost \$22,000. For John Perlick, three-story store and flats, 25 by 75 feet; cost \$10,000. For Wm. Heinrich, three-story store and flats, 25 by 75 feet; cost \$10,000.

Architect P. W. Reuhl reports: For James Walsh, three-story store and flats, 30 by 66 feet; cost \$10,000. For E. Schoeppe, two-story flats, 22 by 54 feet; cost \$5,000.

Architects Lutken & Thislow report: For John Stack, two-story residence, 46 by 50 feet; cost \$10,000.

Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall:

The building situation since my last report has not changed materially, the same hopeful feeling still prevailing. From what can be gleaned, contractors do not, I believe, apprehend any serious strikes, and the year promises exceedingly well. The architects are tolerably busy, but not ready to make full reports until the work is well in hand. The exposition buildings are progressing rapidly, and will be finished by the time specified.

Architects Hannaford & Sons are extremely busy in preparing working drawings for our new City Hall, and they are models for clearness and exactness. The bids are to be in by February 13. This building, when erected, will be a great addition to our city.

Architects Anderson, Drach, Rapp and Elzner have several plans under way, and will be heard from later on.

The Presbyterian Church, on Price Hill, is a beautiful piece of architecture, and reflects great credit upon Architect A. C. Nash.

The National Association of Builders will meet here this month, and matters of great importance will be transacted. The trade here will give delegates a grand welcome and a banquet.

Architect Wm. Stanton Robinson reports the following houses under way: For M. J. Kay, Esq., a frame house of eight rooms, pine finish and slate roof; cost \$3,000. For M. Z. Kerwick, a frame house of seven rooms, pine finish and shingle roof; cost

\$2,200. For R. J. Cresap, Esq., a block of four frame buildings, for stores and flats; cost not yet known. Prospects good.

Architects Buddemeyer, Plympton & Trowbridge report: H. Powell, double dwelling, first story brick, plastered, second story shingled, slate roof, at Westwood, Ohio. Ed. Johnston, dwelling, half timber, second story shingles, slate roof, at Bellevue, Ky. Mrs. Anna J. Lynch, dwelling, half timber, tile roof. Walnut Hills. J. Martin, dwelling, stone first story, half timber second story, slate roof, at Mt. Auburn. Jno. Weyand, dwelling, brick and shingles, at Loveland, Ohio. F. M. Coppock, double dwelling, first story half timber, second story half timber, plastered, slate roof, at Walnut Hills. R. Case, double dwelling, first story brick, second story half timber, plastered, at Walnut Hills. T. E. Williams, double house, shingles first and second story, gables plastered, at Walnut Hills. T. E. Williams, double house, first story half timber, second story shingles, gables plastered, slate roof. Walnut Hills.

Architect Theo. A. Richter, Jr., reports: For C. Rice, a double press brick front store and flat, 50 by 75 feet; three stories high, tin roof, with bathrooms and all modern improvements; also a brick stable, 15 by 50 feet, two stories high; total cost \$9,000. For J. H. Frey, a brick dwelling, 38 by 67 feet, of twelve rooms, slate roof and hardwood finish; also a brick stable, 24 by 33 feet, with asphalt floor, etc.; cost \$10,000. For F. Pagels, a five-story stone front store and flat building, 50 by 105 feet, with soft pine finish, tin roof, etc.; cost \$10,000. Prospects good, and has several sketches made already for parties contemplating building this year.

Architect Emil G. Rueckert reports: For Louis Hoffmann, an addition to his building, to be of brick, three stories high, with ten rooms, including large wine room, serving and pantry rooms; cost \$5,000. For Julius Stephany, a remodeling job of a four-story brick, new roof, cellar, entire new plumbing, etc.; cost \$5,000. For Henry Jostworth, Norwood, Ohio, a two-and-a-half story brick dwelling, tin roof, etc.; cost \$2,500. The Ahrens' Manufacturing Co. will build a five-story brick factory building, 43 by 69 feet, with tin roof, to cost \$15,000.

Cleveland, Ohio.—Architect A. Druiding, of Chicago, reports: For Rev. Joseph Koudelka, St. Michael's Catholic Church building, 160 by 80 feet; cost \$65,000.

Danvers, Ill.—Architect W. H. Milner, of Bloomington, reports: For Dr. Parkhurst, frame residence, 40 by 60 feet; cost \$3,500; projected.

Danville, Ill.—Architect W. H. Milner, of Bloomington, reports: For F. B. Shoaff, frame residence, 27 by 50 feet; cost \$3,000; under way.

Delavan, Ill.—Architect W. H. Milner, of Bloomington, reports: For L. W. Lawton, frame residence, 31 by 50 feet; cost \$2,500; projected.

Des Moines, Iowa.—Outlook is not very bright for building this season, especially during the early months.

Architects Hackney & Merrill report: For J. K. Macomber, frame dwelling, 30 by 50 feet; cost \$3,000; projected. For Hoyt Sherman, mausoleum, 14 by 20 feet, limestone; cost \$2,500; projected.

Duluth, Minn.—P. D. Armour & Co., of Chicago, have engaged J. C. Pierce to erect a cold storage warehouse, 80 by 175 feet, eight stories high.

Major H. Bell is having plans prepared for a ten-story office building. The Equitable Life Insurance Company will erect a \$300,000 office building.

Elkhart, Ind.—Outlook good, and with the accession of the Grand Trunk Railroad, which is now assured, several large factories and hundreds of residences will be erected this season.

Architects N. Weaver & Son report: For Richard Blackburn, two three-story brick and stone store buildings, 41 by 80 feet; cost \$8,000; plans under way. For Levi Chamberlain, two three-story brick stores, 40 by 120 feet; cost \$10,000; plans under way. For H. E. Bucklin, remodeling the Clifton House at a cost of \$25,000. For A. M. Tucker, three-story brick store building, 20 by 120 feet; cost \$5,000; under way. For Crowl Bros., three-story brick store building, 20 by 120 feet; cost \$5,000; under way. For Maria Buddington, two-story brick store building, 40 by 95 feet; cost \$10,000; projected. For O. N. Lumbert, brick residence; cost \$5,000; projected. For O. Z. Hubbell, brick residence; cost \$4,000; projected. For C. A. Strongreest, brick residence; cost \$3,000; projected. For Excelsior Starch Co., brick factory building, 80 by 250 feet; cost \$10,000; under way. For P. S. Steiner, livery stable, 20 by 165 and 20 by 65 feet; cost \$6,000; projected. For C. B. Hibberd, frame dwelling; cost \$2,000; projected.

El Paso, Tex.—Outlook good for this early in the season.

Architects Stewart & Carpenter report: For Wells, Fargo Co., three-story pressed brick, terra-cotta and stone bank building, 40 by 65 feet; cost \$25,000; under way.

Fort Smith, Ark.—Architects Lee & Roth report: Outlook for 1888 is good. No large work; perhaps the limit of cost will not exceed \$50,000 for any one building, unless unforeseen developments occur. For S. P. Day, two-story and basement stone front building, 50 by 100 feet; cost \$7,000. For Israelite congregation, frame, Moorish design, church building, 40 by 100 feet; cost \$6,000. For B. Wolf, frame residence, 42 by 60 feet; cost \$5,000; taking figures. For Jacob Brinoldi, frame residence, 30 by 40 feet; cost \$2,500; projected. Also superintending the construction of the Anheuser-Busch Brewing Co's buildings, after plans by E. Jungenfeld & Co., of St. Louis, Mo., pressed brick and stone, 35 by 150 feet; cost \$25,000.

Fort Worth, Tex.—Architect J. J. Kane reports: For R. E. Maddox, brick business block, 75 by 200 feet; cost \$26,000; under way; Heck & Baker, contractors. For D. Norton, brick business block, 25 by 90 feet; cost \$5,000; Heck & Baker, contractors. For Geo. L. Gause, brick business block, 80 by 100 feet; cost \$12,000; under way; Townsend & Lusher, contractors. For M. L. Holt, brick residence, 48 by 72 feet; cost \$5,500. Stone church, 70 by 136 feet; cost \$75,000; projected. Stone church, to cost \$10,000; projected. Also a number of small dwellings, etc., ranging in cost from \$1,000 to \$3,000.

Gaines Station, Mich.—Architect Claire Allen, of Ionia, reports: For School Board, two-story brick and stone school house, 58 by 66 feet; cost \$4,000; Price & Knisley, of Detroit, contractors; work not yet commenced.

Grand Ledge, Mich.—Architect Claire Allen, of Ionia, reports: For Peterson & Babcock, block of three stores, stone, plate glass, galvanized iron, etc., 75 by 80 feet; cost \$11,000; contract not let. For W. R. Clark, two-story stone residence; cost \$3,000; not let.

Hiawatha, Kan.—Architects Schrage & Nichol, of Kansas City, have prepared plans for a \$50,000 court house to be erected.

Joliet, Ill.—Architect H. Boehme reports: For A. C. Clement, three-story and basement building; cost \$10,000; contract not let. For E. C. Hager, remodeling residence; cost \$2,000; not let. For J. E. Henderson, remodeling residence; to cost \$2,000; not let. For A. R. Clark, dwelling; cost \$2,500; not let. For Joseph Stevens, double two-story building; cost \$5,000; not let. For W. G. Wilcox, dwelling; cost \$3,000; not let. For Judge Garnsey, dwelling; cost \$2,000; not let.

Kansas City, Mo.—Architect C. B. Lakin reports: Prospects for the coming season are very good. For W. W. Perkins, three-story brick flat building, 75 by 60 feet; cost \$20,000; projected. For J. J. Green, two-story brick tenement block, 43 by 128 feet; cost \$18,000; projected. For J. Clark, two-story brick residence, 40 by 42 feet, slate roof; cost \$8,000. For W. C. Hunt, two-story frame residence, 30 by 50 feet; cost \$5,000.

Lake Odessa, Mich.—Architect Claire Allen, of Ionia, reports: For E. E. Wager, two-story frame dwelling; cost \$3,500; not let.

Lemont, Ill.—Architect H. Boehme, of Joliet, reports: For Mathew Warner, residence; cost \$5,000.

Little Rock, Ark.—Architect B. J. Bartlett. For C. B. Clark, two-story brick residence, 64 by 55 feet; cost \$7,000.

Log Bridge, Ill.—Architect H. Boehme, of Joliet, reports: For Rev. Father Bollmann, remodeling church; cost \$4,000.

Manhattan, Kan.—Architects Schrage & Nichol, of Kansas City, have prepared plans for a \$75,000 female seminary to be erected here.

Minneapolis, Minn.—Architects Orff Bros. For A. McCloud, double three-story house; to cost \$1,000.

Architect W. H. Hayes. For Andrews Presbyterian Society, church building, to cost \$30,000.

The following permits have been issued recently: John E-stagen, double two-story store and dwelling; cost \$10,000. R. L. Berglund, three-story stone store and flats; cost \$20,000. J. A. Ridgway, two-story frame dwelling; cost \$8,500. De Soto Lumber Co., frame planing mill; cost \$14,000. J. F. Culom, six one-story brick stores; cost \$9,000. A. Bergman, two-story brick veneer dwelling; cost \$9,000. N. A. Freeburg, four two-story frame dwellings; cost \$12,700. H. G. Darrow, two-story frame dwelling; cost \$5,000. Webster & Hoyt, two two-story frame dwellings; cost \$16,000. Frank E. Little, four-story brick and stone warehouse; cost \$50,000. Wm. Donaldson, five-story brick and stone building; cost \$200,000.

Morris, Ill.—Architect H. Boehme, of Joliet, reports: For L. Gebhart, two-story and basement double store building; cost \$10,000.

Nashville, Tenn.—Architect Geo. W. Thompson. For Wm. Duncan, four-story hotel building, 105 by 128 feet; cost \$50,000.

North Branch, Mich.—Architect Claire Allen, of Ionia, reports: For the School Board, two-story brick and stone school house, 58 by 66 feet; cost \$7,000; to be commenced in spring; contract not let.

Omaha, Neb.—Architect Sidney Smith reports: Present condition and outlook very good. A large number of new buildings are talked of. For Chas. F. Manderson, four-story brick and stone store and flat building, 66 by 60 feet; contract ready to let. For Mardis Bros., three-story brick and stone store and flat building, 60 by 88 feet; cost \$35,000; contract ready to let. For James I. Lovett, three-story brick and stone tenement block, slate roof; cost \$20,000; contract ready to let.

Savannah, Ga.—Architect J. J. Nevitt reports: For Episcopal Society, Orphans' Home building, Stony Point natural cement brick, with artificial stone trimmings; cost \$16,000; John R. Easton, mason; R. N. Stunt, carpenter. Remodeling First Regiment Armory, frame building; cost \$6,000. For J. P. Germain, remodeling residence; cost \$2,500. Episcopal church building, frame; cost \$2,000; at Chetrom, Fla.

Sioux City, Iowa.—Architect E. W. Loft reports: For School Board, a \$20,000 school building.

St. Louis, Mo.—Architect A. Beinke reports: For Chris. Von der Ahe, two-story store and flat building and two story dwellings, 97 by 150 feet; cost about \$30,000. For Haupteter & Eckhoff, three-story factory building, 50 by 112 feet; cost \$12,000. For W. H. Neidringhaus, two-story residence, 36 by 40 feet; cost \$5,000.

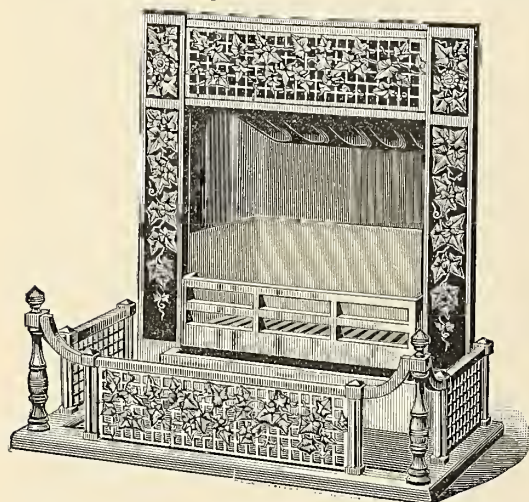
Architect Chas. F. May reports: For Aug. Bruegemann, block of five two-story dwellings, 90 by 63 feet; cost \$15,000.

Architects P. F. Meagher & Son report: For C. Crevling, two-story carriage repository, 50 by 150 feet; cost \$5,000. For J. L. Isaacs, two-story residence; cost \$5,000.

Architect J. B. Legg has prepared plans for A. A. Eddy, for a three-story flat building; cost \$10,000.

Topeka, Kan.—Architect Seymour Davis reports: For Wm. C. Knox, four-story and basement office building, 50 by 130 feet; cost \$40,000; not let. For Central National Bank, four-story and basement office building, 25 by 150 feet; cost \$60,000; contract not let. For J. E. Frost, frame residence, 46 by 50 feet; cost \$10,000; contract not let. For ex-Governor S. J. Crawford, four-story and basement business block, 50 by 100 feet; cost \$35,000; under way; Henry Bennett, builder. For C. H. Kendall, three-story business block, 25 by 150 feet; cost \$10,000; contract not let. For T. B. Mayo, frame residence, 40 by 48 feet; cost \$800; under way. For Sisters of Bethany, addition to college building, 200 by 40 feet; cost \$50,000; contract not let. For W. T. Clark, stone and frame residence; cost \$5,000; contract not let. For P. L. Soper, frame residence; cost \$3,000; T. H. Stevenson, frame residence; cost \$3,000; contract not let. For a Boston syndicate, stone and frame hotel building, to cost \$75,000; contract not let.

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PROPOSALS.

NOTICE TO ARCHITECTS.

Architects will submit plans and specifications to build a court house in the city of Lincoln, the county seat of Lancaster county, Neb. Said plans and specifications will be filed with the county clerk on or before noon, February 21, 1888.

Said plans and specifications are to call for a building, including plumbing, gas fitting and steam heating, not to cost more than \$170,000.

The county commissioners of said county reserve the right to reject any and all plans and specifications that may be submitted.

No compensation will be allowed for plans rejected. Architects will carefully prepare estimates of cost on the entire work in detail, so it may be fully understood.

For further information address County Clerk. By order of the Board of County Commissioners.

O. C. BELL, County Clerk.
Lincoln, Neb., January 20, 1888.

COURT HOUSE.

[At Liberty, Ky.]

Up to 12 o'clock noon, 5th day of March, 1888, proposals will be received for the erection of a new Court House at Liberty, Casey County, Ky.

Plans, specifications, etc., are on file at the office of the county clerk, at Liberty, Casey County, Ky., also at the office of the undersigned at Louisville, Ky.

The right is reserved to reject any or all proposals. McDONALD BROS., Architects.
Bull Block, Fifth and Market streets, Louisville, Ky.

TOWN HALL.

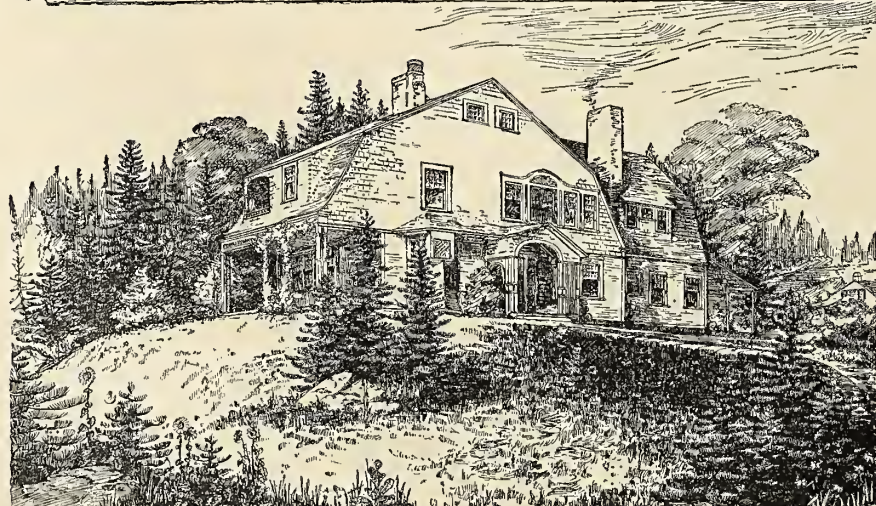
[At North Kingston, R. I.]

Scaled proposals will be received at the office of William Gregory until 12 o'clock, M., of the 27th day of February, 1888, for the carpenter and mason work required in the construction of a brick town hall for the town of North Kingston, R. I., to be erected in the village of Wickford.

Plans of the building may be seen and any information concerning the same may be obtained on or after Tuesday, January 31, by applying at the office of William Gregory, Chairman of the Building Committee, Wickford, or at the office of Edgar B. Peck, architect, No. 5 Custom House street, Providence, R. I.

The right to reject any or all bids will be reserved. WILLIAM GREGORY,
GEORGE A. SPINK,
WALTER RODMAN,
Building Committee.

HOUSE AT THE "UPLANDS" MILTON, MASS.
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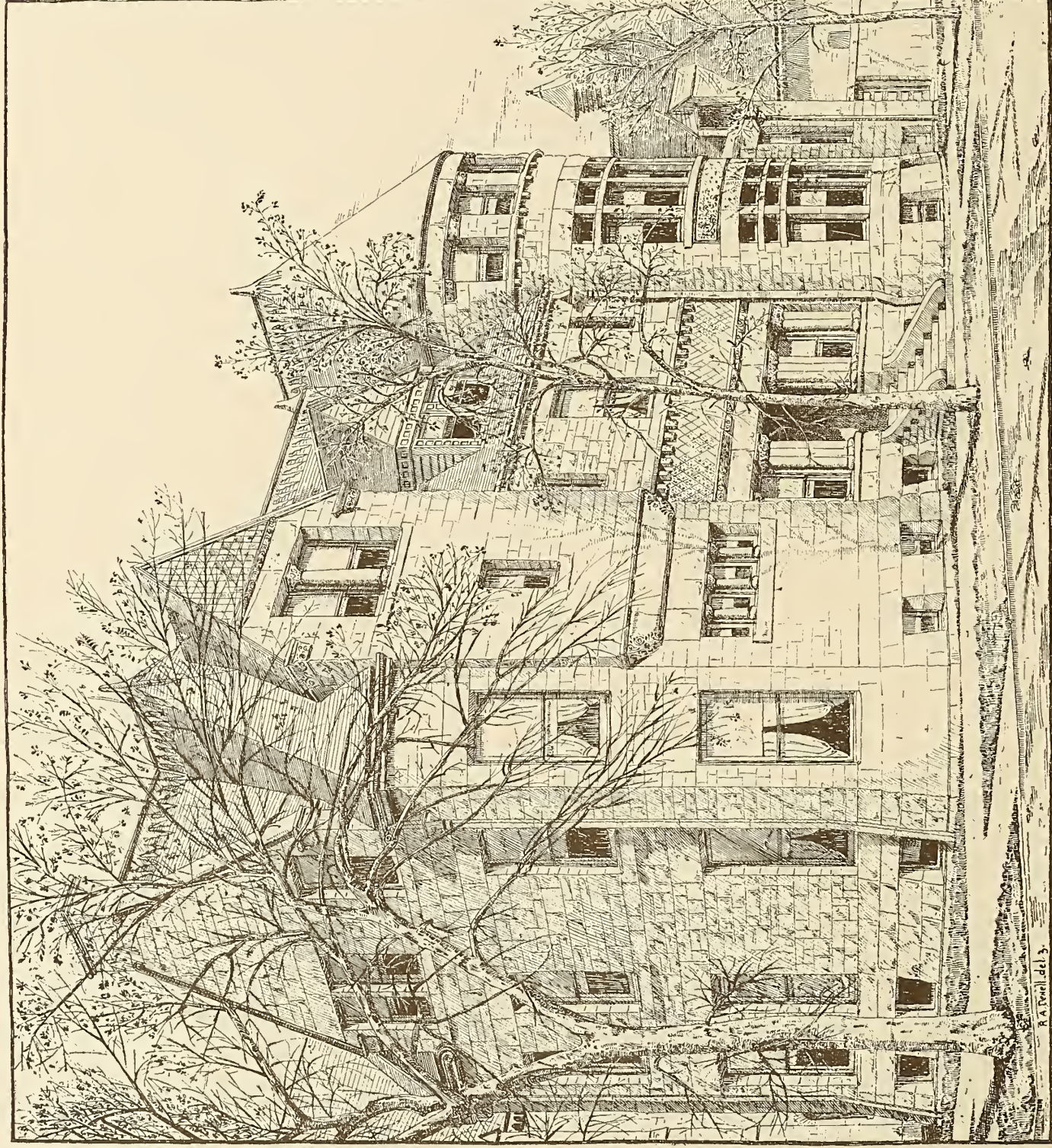
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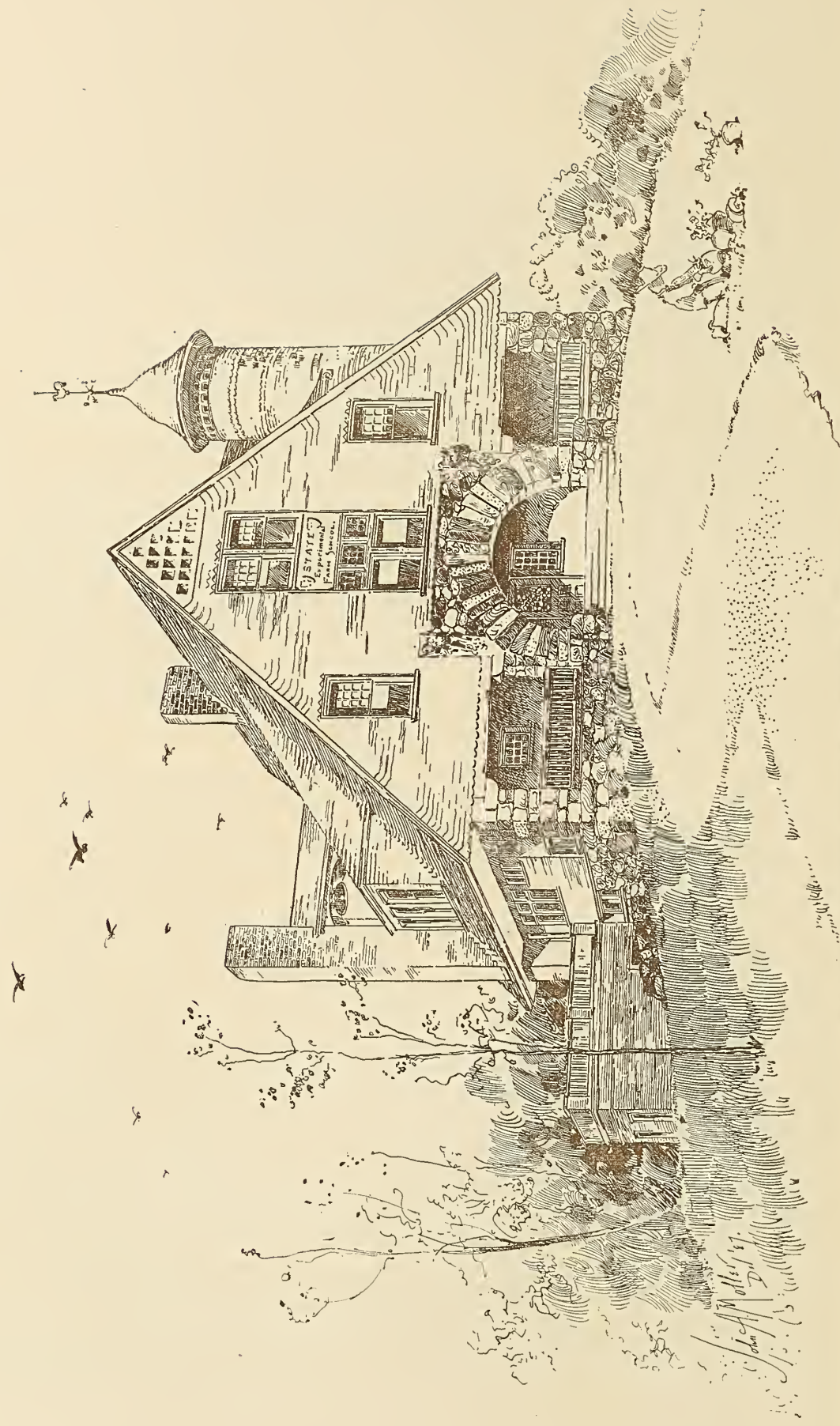


RESIDENCE FOR MRS. V. C. THOMPSON, CHICAGO.

COBB & FROST, ARCHITECTS.

R. A. Powell del.

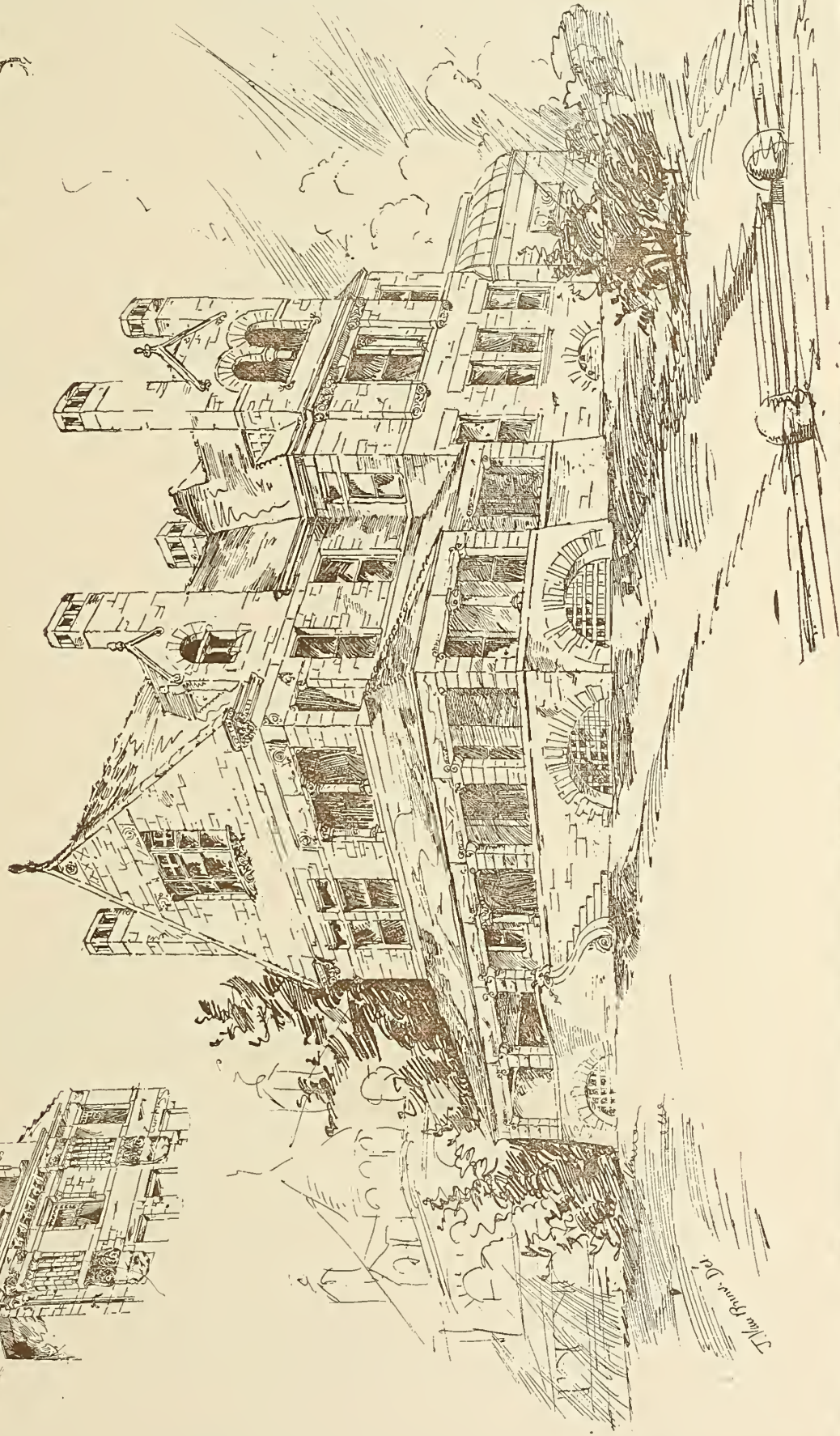
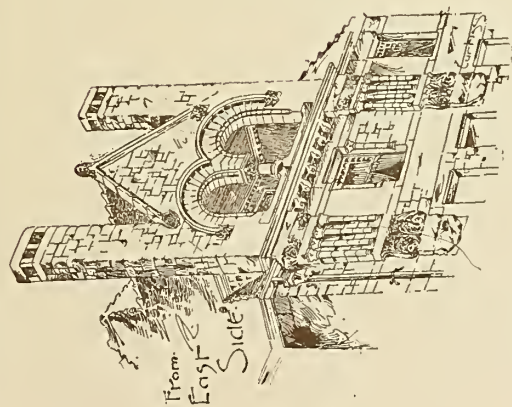
L. S. Buffington Architect
Minneapolis, Minn. 1887.



STATE EXPERIMENTAL FARM SCHOOL.
L. S. BUFFINGTON, ARCHITECT, MINNEAPOLIS, MINN.

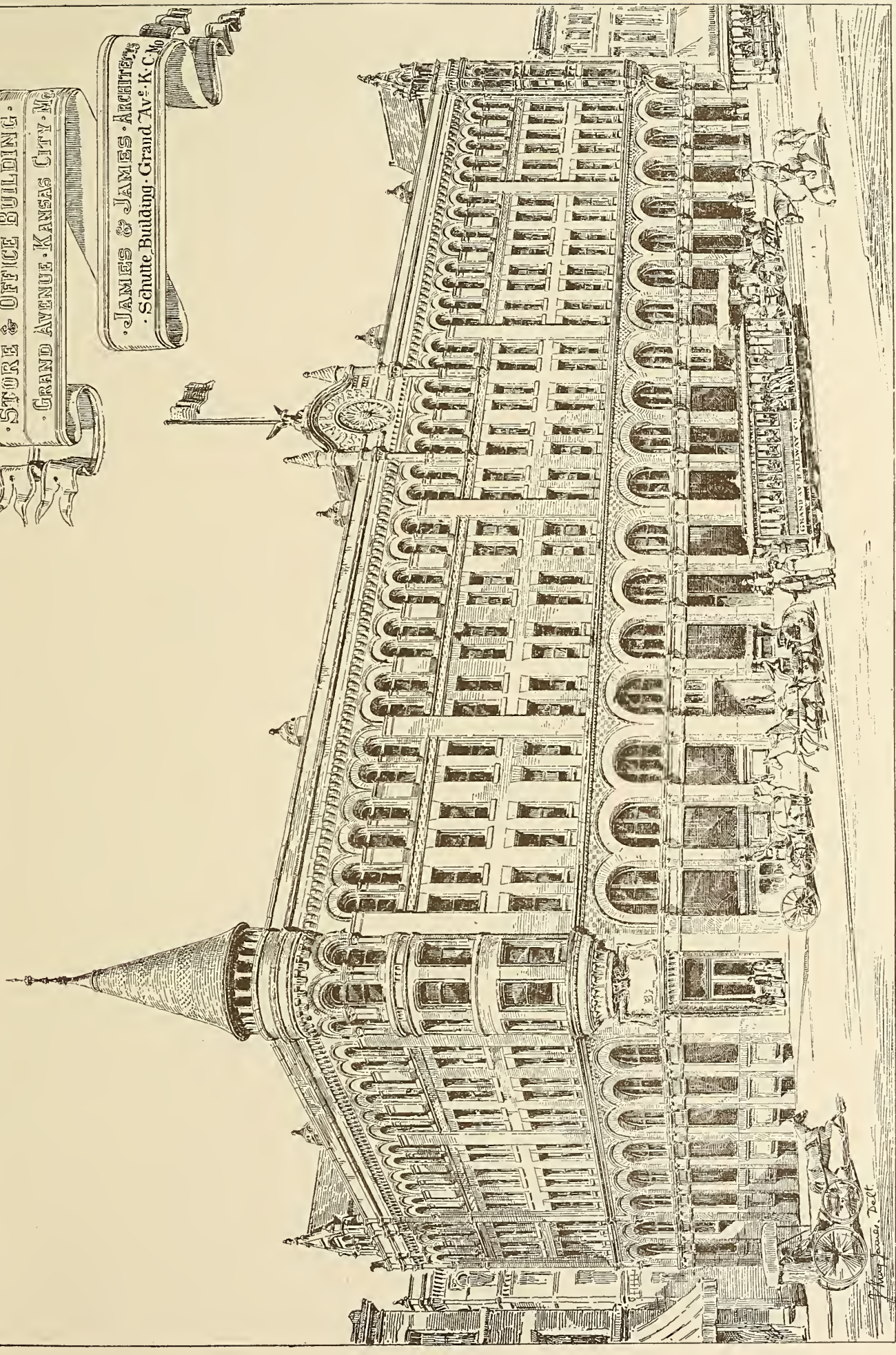
Perspective Sketch
Residence for
Robert Gullham Esq

A. Van Bunt Architect



·STORE & OFFICE BUILDING·
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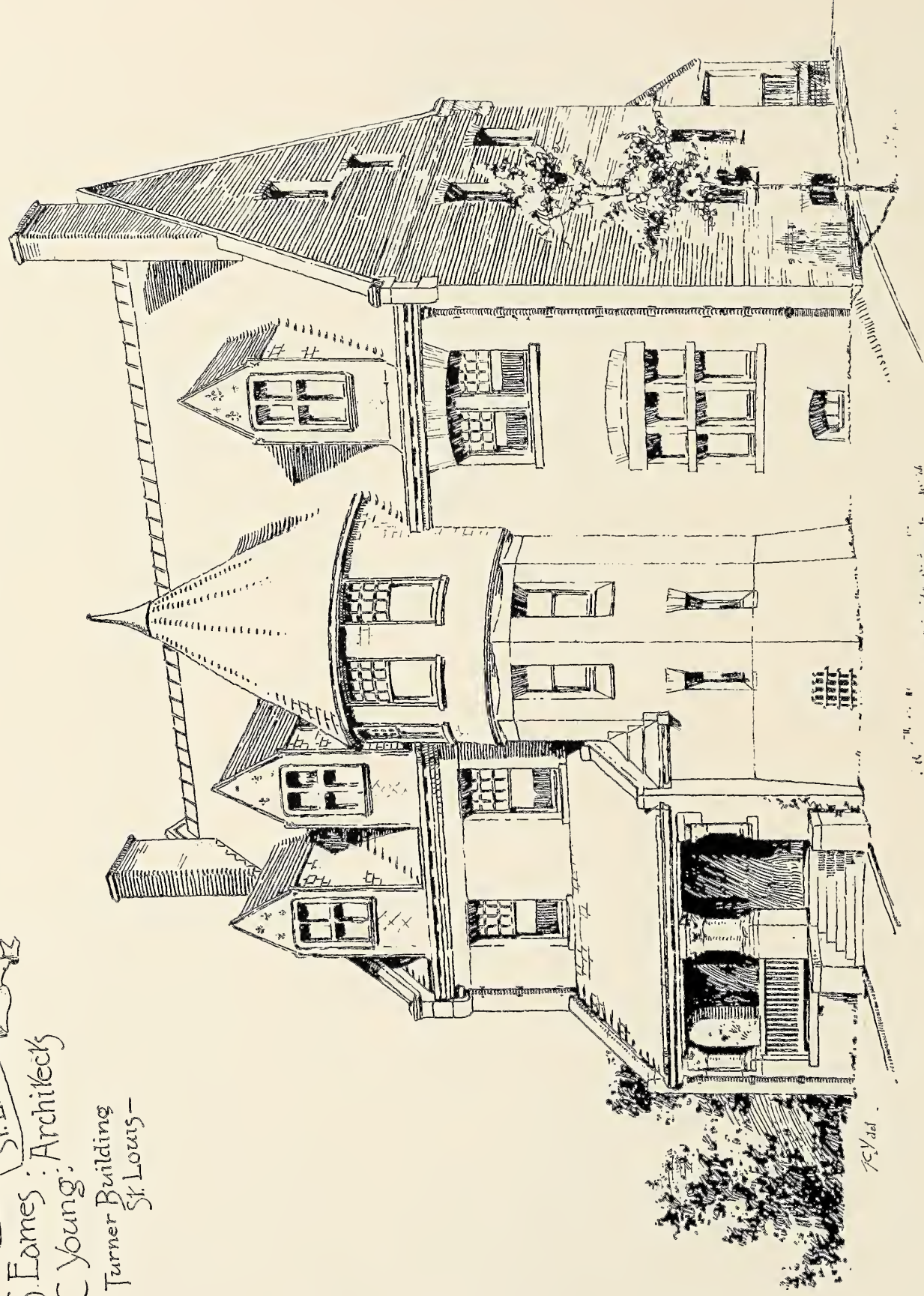


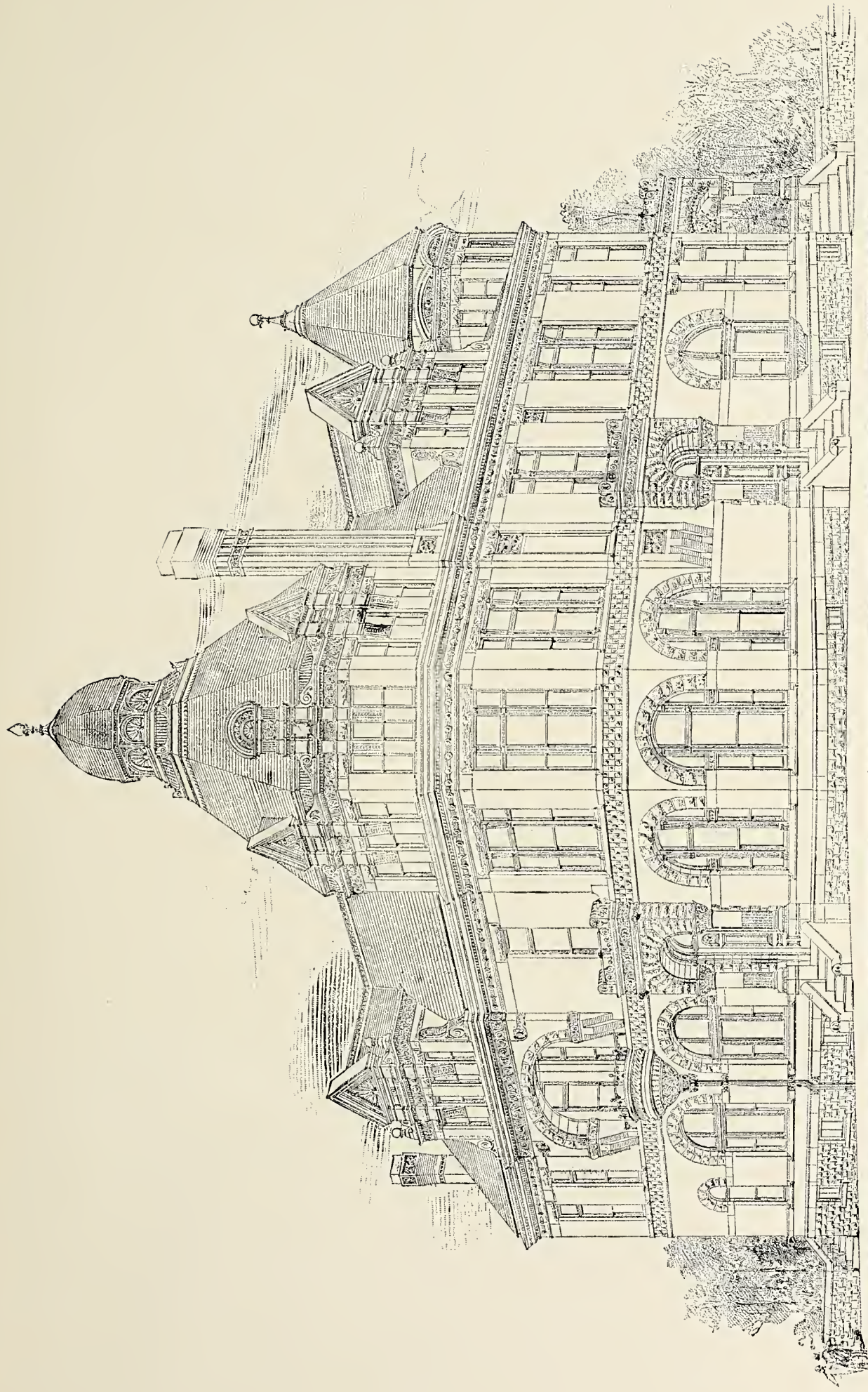


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House for
Mr Chas T Clark
St. Louis Mo
Wm S Eames : Architects
Th: C Young,
76 Turner Building
St Louis -



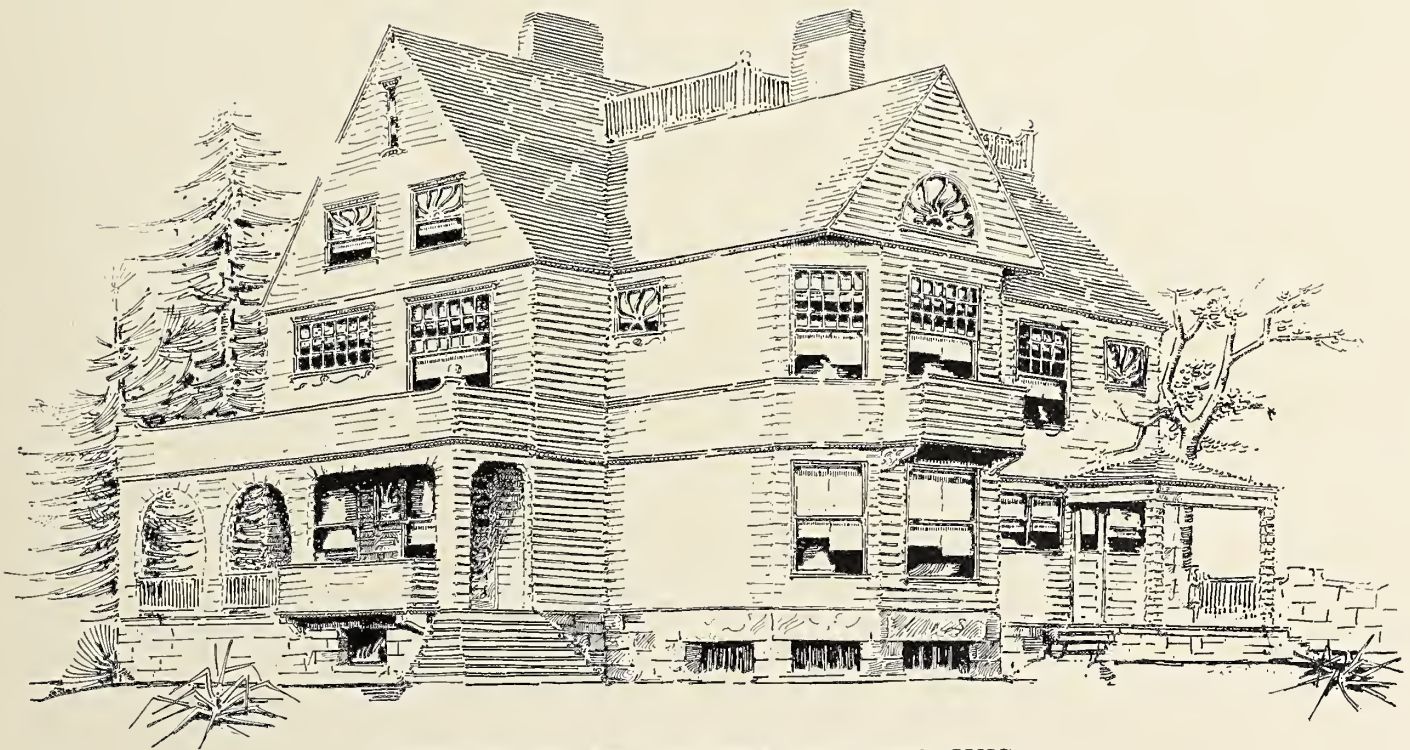


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Frank L. Wright



RESIDENCE AT HELENA VALLEY, WIS.

FRANK L. WRIGHT, ARCHITECT, CHICAGO.

THE INLAND ARCHITECT AND NEWS RECORD.

INTERMEDIATE NEWS NUMBER.

Vol. XI.

FEBRUARY, 1888.

No. 2

NATIONAL ASSOCIATION OF BUILDERS.

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THE second annual convention of the National Association of Builders of the United States of America was held at Cincinnati, February 7, 8 and 9 last. While those who were so fortunate as to attend the first convention, and saw the methodical manner in which the association was organized, and its members at once commenced to carry out its purposes by practical work, may have been impressed with the system that prevailed, as well as the caliber of the delegates who transacted the business of the convention, it could not have been with feelings other than astonishment that the advance made since the last convention was observed in this. Out of thirty exchanges in the association, twenty-four were represented by delegates, each exchange being entitled to one delegate to every fifty members. Chicago has the largest exchange, and sent eleven delegates; Denver and Sioux City the smallest, and sent one each; but the building interest of the country was fully represented, there being a total of eighty-four delegates in attendance.

ONE of the most important reports and most fully discussed by the delegates, taking up the better part of two of the six sessions, was that upon the preparation of estimates covering the preparation of plans and specifications by the architect. Two prominent points were brought forward: One was the necessity of having complete details from the architect before work is figured, and that plans and specifications alike should show what was intended to be figured upon. The other point was that all plans and specifications should be in ink or made by some indelible process. Instances without number were cited in support of these points, which were passed by the convention with a resolution directing the several exchanges to meet the architects in their respective districts, and try and obtain their coöperation in the proposed reform. These points all architects of standing will indorse and carry out wherever practicable.

ANOTHER matter of importance to the entire building interest was that regarding strikes among employes in the building trades. The report of the Legislative Committee on this subject was strongly in favor of permanent arbitration. While the discussion developed some opposition from those who thought the labor in the building trades too unreliable to be treated with, the good effect of arbitration in the past will probably cause this method of not only settling, but preventing trouble between employes and employers in the building trades, to be adopted by all trades represented in the association.

THE apprenticeship question, and the subject of lien laws in the several states received attention, while manual training was long and ably discussed by the delegates, members of almost every delegation having something to say upon this subject. Standing, as it does, in the minds of those who have the future of the country, and especially the building interest, at heart, as a solution to the apprenticeship problem, more than one delegate pronounced it the most important of all the measures discussed in the convention. The general expression was in favor of free manual training made part of the public school system of the country, so that hands would be as universally educated as brains, and that mechanical schools should be organized by private enterprise similar to our schools and colleges, for the use of those who choose to follow mechanical pursuits.

FROM a point of order and precision we have never seen a more thoroughly organized, business-like convention. Each delegate who spoke seemed to be prepared with his argument and his deductions. The chairman and secretary performed those functions with a thorough understanding of the work, and while there was scarcely an approach to effusive oratory, the chair was quick to see any deviation from the question in hand and checked the speaker immediately, thus allowing none of the time of the session to be wasted. It was also noticed that though the sessions were called at 9:30 A.M. and continued to one P.M., that upon commencing at two o'clock each day almost every delegate was in his place at the tap of the gavel. This feature of order and promptness is most commendable, and architectural conventions could learn a valuable lesson from observing the parliamentary usages so early adopted in the history of the conventions of the National Association of Builders.

ONE of the most pleasant features of the convention was the thorough hospitality extended the visiting delegates by the Cincinnati Exchange. While the business of the convention occupied the entire three days, each evening was given to some entertainment. About forty ladies accompanied their husbands, and to these the Cincinnati ladies were most cordial and hospitable, occupying each hour with some form of entertainment, making their visit one long to be remembered. As the next convention will be held in Philadelphia, the ladies, as well as the Exchange of the City of Brotherly Love, will have an opportunity to exhibit that excellent quality from which the name of their fair city is derived; and, no doubt, they will do so, but in their own way, and equally satisfactory to the visitors.

Improvements and Advancement in Methods of Brickmaking.*

BY J. E. ADAMS, OF INDIANAPOLIS, IND.

THE subject of the improvement and advancement in methods of brickmaking, assigned to me by your executive board, is not a question to naturally claim the attention, hold the interest, or raise an enthusiastic and responsive sentiment in the mind of the average man; on the contrary, the subject is one that deals with cold material, practical facts, and possibly, uninteresting conclusions and results; but to those whose lines of thought have been turned in the direction of manufacturing and using this most useful and enduring of all building material, the consideration of the subject is one of absorbing interest, and involves questions of large proportions and great possibilities.

Therefore, in appearing before you, I am imbued with feelings of apprehension in not being competent to fully meet the requirements of the hour in presenting the practical features of my subject in a manner to acceptably claim your attention and merit your approval. My purpose will be to present our case in as plain, brief and direct a manner as possible. At the outset I risk no fear of contradiction in making the statement that history, both sacred and profane, mentions brick made from clay as the first material used in the construction of shelter for man. The plastic nature of clay, and its features of becoming hard and serviceable, under a degree of heat, into a substance more firm than stone, are qualities obviously adapting it for substantial and lasting building purposes, that from the earliest Babylonians to the present time, no age has failed to perceive and use it in its many and varied forms, as the best, cheapest, most feasible and durable of any material found by man in his earliest efforts and struggles to obtain shelter for himself and family.

From its frequent mention by ancient historians the manufacture of brick appears to have been the most important as well as the first industry of the ages.

The walls of ancient Babylon and the cities of Egypt were constructed of burnt brick laid in bitumen, as well as the river walls, and hydraulic works of that section and the structure of the Tower of Babel. Herodotus mentions an inscription upon one of the Pyramids of Egypt, the translation of which makes it read: "Do not undervalue me by comparing me with pyramids of stones, for I am better than they as Job exceeds the other Deities, for I am made of brick made from clay."

Inscriptions of a like character have been found in many of the structures of high antiquity. Pliny mentions the general use and varied purposes adopted to the use of brick, referring to the Greeks as adepts in the manufacture and building of brick houses, having laws not allowing them to be used until after they had been seasoned and tried five years, and had received the approval of a magistrate.

The palace of Croesus, King of Lydia, and many other Asiatic sovereigns, some of the Temples of Athens, as well as the walls of that city, were built of this material. The Romans were experts in brickmaking. In all the great existing ruins of Rome bricks are found in great profusion, and the varied use is evidenced by many of their works standing to this day, while the stones of the Coliseum, and the other great public works of the Imperial city, have crumbled and succumbed to the ravages of time. The Roman bricks are comparatively sound and retain their rectangular form and hardness.

In the aggressive subjugation of Great Britain, the Romans left but few evidences of their power and advancement in the practical arts, more impressive and lasting than the deep red and well burned brick found in the walls and forts of England. In the reign of Henry VIII, brick-making had attained great perfection. The Dutch have been awarded the credit of making the best brick of the middle ages; so solid and durable were their bricks that they were used for their floors and street pavements. Specimens of Holland brick can yet be seen in New York in buildings erected by early Dutch settlers. The bricks used were brought over from Holland.

None made at any period of time are more sound and durable. Even ornamental brick were made in Asia very early in the centuries. Brick made at Nepal were so remarkably compact and elegantly ornamented on the surface to be peculiarly fitted for architectural decorations. The Chinese gave to their brick the texture of porcelain.

The ancient Peruvians excelled in the manufacture of brick to such a marked degree that Ulloa was confident that there must have been some secret in their composition.

Gentlemen, you must overlook a pardonable pride on the part of brick-makers in following an industry more ancient than any represented on the floor of this convention.

On down through the ages and thousands of years to the present time brick has been recognized as the durable building material. Nothing to equal it has been found, and hardly a shadow of doubt exists in practical minds that nature's forces, coupled with the inventive genius of man in his researches and inquiries in the line of progressive improvements, will ever find a material to supplant it. In the improvement of modern brick-making, the advancement has been largely in the mechanical and manufacturing department, not in the character of the material of which brick is composed.

The earth has yielded up to man no clays superior to those of Asia and Europe, used in the manufacture of brick early in the centuries; and what credit this generation assumes in the improvement of brick and the methods of manufacture is largely in the preparation of the material and the proper use and application of the improved methods in making and burning.

The manufacturer of brick cannot point with any degree of pride or satisfaction to much progress or advancement made toward the betterment of his methods in the early part of this century, for it was not until 1835 that even an attempt was made to make a brick, except by the old-time

primitive hand methods. In that year the first horse-power brick machine was invented; its operation by steam was not perfected until 1840, in which year the father of the writer was mobbed for introducing a machine in the city of Philadelphia. It was destroyed and the castings were thrown into the Schuylkill river, such was the prejudice and antipathy of the old-time brickyard employes to any methods or improvements that appeared an innovation to their old-time ways. However, as the demand for brick increased with growth and progress of the country, so also the markets, especially in larger cities and populous centers, called for a better article, until the active clay worker, and the cunning hand of the machinist, in a measure, solved the problem and put in practical shape and successful operation methods that had been deemed impracticable and theories pronounced exploded. While there are clays so chemically constructed as to be difficult to manipulate and reduce by machinery to a consistency requisite for a good brick, yet in the last few years machinery has in a large degree supplanted the old-time manner of producing brick that has been in vogue for centuries.

Until the brickmaker of today can point with pride to the improved methods of conducting his business, and view with satisfaction the wonderful changes wrought in the production of this most useful article, the quality of the output and the character of the product throughout the country, well attest the vast improvement and the certain betterment of the business of brickmaking. I venture the assertion that among the practical and observing men attending this gathering, no matter what line of thought their minds have followed, or what special departments of the great building interest of the land they have made the study and business of their lives, there are but few who have observed the noticeable change in the character and substantial and permanent improvement in the quality of the brick in their respective localities.

If fully engrossed in your own specialty, gentlemen, you can but be mindful of the beautiful color, smooth surface texture and architectural design of the brick of such cities as Philadelphia, Baltimore, Trenton, Zanesville, Evansville, Cincinnati, Chicago, St. Louis and other localities I might mention.

Improvements in brickmaking, as in all other branches of business, are made practical and useful only through a full understanding of the requirements of the trade and careful attention to a great self-evident business law, deviations from which generally result in disaster to him who does not take the pains to learn his business, even to the minutest details. From the old-time hand process to the crude and illy constructed pug mill, then the tempering wheel, finally the machine run by hand, then the horse power, until today we find hundreds of different kinds and character of brick machines run by steam and adapted to the different clays of the different states, skillfully adjusted and perfectly automatic in the wonderful construction, many capable of turning out fifty thousand or more perfect bricks per day. Time would permit mentioning only a few localities where the great advancement in the business is progressive to a marked degree. I would ask the builders from Philadelphia to bear testimony to the wonderful growth and progressive advancement in the art of brickmaking in the city of "Brotherly Love." From the brick in William Penn's house, now in Fairmount Park, though made nearly two centuries ago, crude, rough and irregular, yet sound, strong and almost indestructible, giving promise of centuries to come to the beautiful, smooth, and almost incomparable pressed brick, which approximates more nearly a perfect brick than any yet produced on either continent, and which occupies so conspicuous a place and adds so much in beauty and effect to the striking yet distinctive character of architecture of that beautiful city. In New York and other Atlantic cities we find houses built of brick, brought from Holland fully two hundred years ago, without a flaw or sign of decay, and apparently as firm and sound as when first laid in the wall.

When we compare the Dutch brick with those made on the North river, at Haverstraw, Croton and other contiguous points, the comparison is marked, and we can but be impressed with the marvelous improvement in the character of the brick found in the massive edifices and magnificent structures of our metropolitan city, where, in the ceaseless activity of the building interest, one thousand millions are annually consumed.

In Chicago, we find the brick produced in the early history of the city indifferent in appearance and below the average in quality, while today, no city or section gives evidence of higher advancement in the art of brickmaking than is found in the sky searching and almost incomparable buildings of that great city on Lake Michigan, whose growth is indeed the marvel of the century, or where the science of building in all the different and varied departments is advanced to a higher place than is to be found in the beauty, strength and adaptability and almost incomparable architectural designs of the great public and business structures and private residences of that wondrous city, whose magic growth and unquestioned prosperity is justly the pride of all Americans. The fine face brick made in St. Louis, occupies a prominent place in the markets of the central and western states, and is excelled by none; the same in a measure can be said of the brick produced in Zanesville, Evansville and other points to which I might refer if time would permit.

It would be a pleasure for me to further extend my line of thought, in presenting more fully the salient points and interesting features of the material growth, practical and substantial improvements, as well as the vast and dependent relation inseparably connected with this most useful and hitherto neglected industry. The subject is one of absorbing interest to the manufacturers of brick, and overshadowing importance to the other departments of the building interest, for, gentlemen, no matter which particular line of the varied building interests represented on this floor you may follow, your observations and calculations in estimates and close business relations with the several departments of the superstructure, gives you certain information and intimate knowledge of the high importance and unquestioned dependence brick bears to the construction of the whole building, not only in the support, strength and solidity of the building, but in the beauty and architectural features of the structure.

Brick stands alone, the one article used in building, superior and above any known material, in its ability to successfully resist the ravages of the

* Paper read before the second annual convention of the National Association of Builders at Cincinnati, February 8, 1888.

greatest enemy of our structures—fire. As our population becomes more dense and the country grows in material wealth and prosperity, the advancement of the builder's art will be evidenced by the general improvement in the character of our buildings, and more attention will be given to strength, durability, convenience and harmony of the design, with power to resist the ravages of fire and climatic changes. In the growing demand for the erection of fireproof and time-resisting structures, we may well assume that brick will bear no inconspicuous place.

The universal use and enormous demand for wood as a building material, with the gradual depletion of our forests, and consequent exhaustion of the timber supply, will render lumber difficult to obtain and too costly for general use. Therefore, in the near future, we may naturally anticipate that brick will become more and more the dependence of the builders, and will be almost universally used, and be recognized and acknowledged as the important factor that will assist to practically solve the problem that has claimed the best thought, and enlisted the intelligent judgment of architects, designers and builders for generations, namely, the erection of structures that will withstand the conflict with the elements, and be enduring, and practically indestructible. But, gentlemen, I have trespassed upon your time and imposed upon your patience beyond my purpose, and will therefore conclude this desultory paper with the thought that, perhaps, in the years to come, when the fruits of these annual gatherings have been made manifest, and the resulting benefits apparent, those who come after us will say, in the organization of this association, "we builded better than we knew."

While it is impossible in this early period of the life of the National Association of Builders, in a prospective view of the many improvements and certain advancement of the vast and accumulative interests of which the members of this association are in part the representatives, to form a conception or be made sensible of the future status of our business, or the important and intimate relations the building interests of the future will bear to the growth, expansion and prosperity of this republic, the intelligent advancement of the science, as well as the better character, more convenient and useful nature of the buildings to be erected in the years to come, can only be measured by the growth in wealth, population and material resources of the nation.

While our calling is among the oldest in point of years, yet there is no degree of excellence to be attained wherein we can say, there is nothing now to be learned. On the contrary, the builder who would be abreast of the times, must be a student in all the term implies; constantly alive to the requirements of the trade, and mindful of the tastes and wants of the people.

No occupation is more honorable—certainly none can be deemed more useful to the wants of men, or of greater importance to the age in which we live.

For, gentlemen, if I read your minds aright, and understand the avowed objects of this association, the intelligent aim and organized purpose of these annual gatherings is to bring the science of building to a higher standard of excellence, and thus elevate and dignify this most useful industry.

Improvements and Advances made in Carpentry.*

BY WILLIAM GOLDIE, OF CHICAGO.

HISTORY does not give us a very clear and authentic account of carpentry in the early stages of the world. It tells us very plainly who the first tailor was, and tailoress, but it fails to give us the name of the first carpenter. We are left, then, to conjecture the kind or quality of work performed in the antediluvian days until we hear of the inhabitants beginning to build Noah's ark—a great structure, which we imagine was mostly built by carpenters, probably pretty rough carpenters at that, as we are told that after they had finished this gigantic structure they were all drowned, so that old Noah would not fear having any mechanic's lien placed on the building. That, gentlemen, stopped the progress of carpentry for some time to come. Nor does history give us much information about the cities that were built during the medieval times, when the world was again being inhabited, until we come to the time of the building of Jerusalem and the beautiful city of Athens, whose wealth, culture in the arts and sciences, lifted it up in all its grandeur and enterprise to be the most beautiful city in the world. Josephus gives us a partial view of some of the homes and palaces of the people in Jerusalem, especially of the temple of Solomon and the palace which he built for himself; also the many new cities he built all over the land of Judea. A description of some of these structures might be here mentioned, but as progress is our text, we must move on with time. The temple of Solomon, I will add, was a wonderful building of that day; it would probably not be considered a wonderful piece of workmanship at the present day. But, gentlemen, we will do the mechanics justice that worked at the temple. Solomon brought from all parts of the then civilized world the best artisans in every branch of the building line, and the work of the interior of the temple, with its artistic carving, its different kinds of rich and colored woods, its gold and silver ornaments, its beautiful designs—all are worthy of great praise and credit to the mechanical genius of that day. We have no records, gentlemen, of any strikes in those days. I imagine if Solomon and all his glory had a Chicago strike on his hands, it would have seriously impeded the progress of that institution.

Gentlemen, let us move on with time apace, until we come to the small but never to be forgotten little city of Galilee in Judea, where the name of carpenter took its first respectable calling, and will now continue to be till the end of time, where we see the Savior of the world humbly working as a carpenter to earn his daily bread.

Let us pass the numerous cities built under the rule of the Roman Empire, and travel on with time to the Elizabethan period, even to the twelfth and fifteenth centuries, when that baronial style of turreted castles

came to be a necessity for the safety of the baron and his lieges, built for strength and defense more than for any artistic display. Yet there are many monuments of these structures standing to this day, representative of great ingenuity and skill of the working artists and mechanics at that period. Let us view the old cathedrals built in the fourteenth century and about that time, and we cannot but admire the work and skill of the artisan in all of those branches contributing to their construction.

Gentlemen, the progress of time and carpentry has brought us down to the period when our own land—the land of the free and the brave—was settled and inhabited by the Saxon race—when carpentry had its beginning here.

The occupation of the carpenter has for all ages been one of the most essential known to man. The pioneers of our civilization first hewed down the trees of the forest, and shaped them into logs to build cabins to shield them from the severe winter cold and storms of the inclement season, as well as being an abiding place for the family; and although rude in construction, was looked upon by the men of those days as the brightest spot to them on earth, it being the habitation of all he held most dear, his wife and children.

The rapid increase of our population and progress made in civilization made it a necessity to have greater accommodations in the dwelling house, and steam being brought into practical use as a motive power, by which means logs were manufactured into boards and plank, the carpenter was required to exercise his ingenuity to build more comfortable, larger and handsomer abiding places; consequently, the log hut gave place to the more pretentious frame house, and I presume there are many among the gentlemen present who can look back to their early days and recall the feelings of pleasure they experienced when their parents moved from a smaller frame house, held sacred as their home, to a larger frame building with a handsome piazza in front or at the side of it.

As the number of families and dwellings increased, the village became the city. It was necessary to erect buildings of less combustible materials; therefore the walls of our homes, public buildings and stores were built of brick, stone and iron; but the knowledge of the carpenter was always in requisition, not only for his particular work in the construction of the building, but from his experience and general knowledge of building he was consulted in a great measure more than any other mechanic in the erection of the same, as to the practical employment of various other materials at hand to enter into its construction. He is generally called upon by all other mechanics for some information to be gained.

Gentlemen, we have come to the present day, when, I believe, nay, affirm, that at no time in the history of the world were we as far advanced as we are at the present day. Look at the public buildings of our large cities, and compare them with ancient buildings. Look at the houses and homes of the people, rich and poor, and put them in contrast with those of the olden times. Go with me, if you please, to the suburban homes of our merchant princes of New York, Boston, Philadelphia, Chicago and the beautiful city of Cincinnati. Let us examine them in detail, their beautiful designs, splendid workmanship, artistic embellishments, their usefulness, their simplicity, their sanitary condition and the general comfort of these lovely homes, and I am free to say you will agree with me that never before since the creation of the world has the building of the business houses of the cities, the homes and dwellings of the people of all countries and climes, been as good or as useful or as beautiful as at the present day.

Gentlemen, I thank you for your kind attention to my humble effort on improvement and advances in carpentry.

Improvements and Advances made in Roofing.*

BY E. E. SCRIBNER, OF ST. PAUL, MINN.

IT goes without saying that roofs have existed from the earliest times. It is probable that the first idea in building construction was embodied in a roof, however primitive that roof may have been. While roofs date back far beyond the researches of historians, it still remains that modern roofs differ radically from those of ancient times. New materials are constantly being suggested for use for roofing purposes, and new constructions, with old materials, are continually being thrust upon the notice of architects and builders.

One of the earliest materials for roofing was, perhaps, straw in the form of thatch, or, possibly, it may have been even coarser material than straw. Primeval man is supposed by many writers to have developed the art of building very early. At first he is supposed to have taken refuge in caves, and in the trunks of hollow trees, when overtaken by a storm. Seeking shelter in this way must have turned his thoughts toward means of providing protection more convenient than journeying to the cave, or hollow tree, which nature had provided. It is probable that tents preceded houses. By tents, of course, I do not mean such structures as are known by this term at the present time, but rather a crude shelter in which the skins of animals, rather than pieces of cloth, served as coverings; and here again the idea of a roof occurred. The subject of roofs, like many another, when taken far enough back in the history of the world, affords ample play for the imagination; there are so few facts that there is no room for other than speculative inquiry.

Seeking refuge from a storm under the overspreading branches of a tree must have suggested to our ancestors of a prehistoric age the use of boughs or branches, as a possible shelter in time of need. How man first applied these to the rude structure that afterward became a house, or what the successive steps may have been that led from this crude construction to the modern shingle, I have not time to inquire even did a research promise any results.

Noticing how the hair of animals and the scales of fishes are placed, is believed by some to have led to the idea of shingling; that is, overlapping one layer with another in order to make a roof water-proof. Certain it is

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that man learned to roof his buildings only by the closest observation, and acquired skill only by long practice.

If man in early ages of the world learned to use wood in the form of shingles, covering his buildings somewhat as the scales of a fish cover and shield its body, so, by observation, must man have noticed that bitumen and asphalt, and similar earthy products, have the power of resisting the penetration of moisture, and that they, too, are good roofing materials. It is hard to determine what are the earliest records of roofs even in the literature with which we are most familiar. Bitumen and asphalt certainly date far back; an ancient structure, which all of you will recall by a single allusion, was pitched within and pitched without, and became water resisting both in the hull and in the roof.

What is of more interest at this time, than the consideration of the historical aspects of roofing and the origin of different kinds of roofing, is a survey of the different descriptions of roofing which are in common use throughout our own country at the present time. If one takes the trouble to glance at the advertisements in the different architectural and trade papers, or to look through the numerous circulars which enterprising manufacturers are constantly sending out, he will be impressed with the idea that almost every material known is being used one way or another for roofing. In the first place we have wood in various forms, ranging from the shingle to the elaborate patented wooden roofs used on cars, portable houses and in other places. Next we have metal, running through all the varieties, from cheap iron on one extreme, to high-priced copper on the other, and embracing different styles of tin roofs, as well as many combination schemes, the list of which would require considerable time to relate. The natural resources of the earth are utilized for roofs in the form of *slate* and *bitumen* or asphalt; secondary resources of the earth are also used for roofing as in the form of coal tar cements and in earthen tile. Paper enters into roof construction in combination with other materials; and wood pulp is formed into sheets or boards and constitutes a roof which some insurance companies have indorsed in very strong terms. India rubber is used for roofs; felt is the foundation for many kinds; pine tar competes with coal tar, and so the list might be extended until a much larger class of materials is named. The question of improvements and advances made in roofing opens up a wide field of inquiry. The general question may be presented in two forms: First, can the best roofs, at the present time, be had for less money than formerly; or, second, can a roof, of the same quality, be had for less money than has been the price in other years? Still a third form of putting the question suggests itself: Will not the same amount of money, at the present time, buy a better roof than it would a short time since? The answers to all of these questions indicate a substantial advance and improvement in roofing matters; and yet when we survey the buildings of the country we cannot fail to be impressed with the idea that roofing, in many cases, is slightly done, and that, on the average, roofs are of poorer quality at present than formerly. When it comes to a more careful inquiry, the investigator is compelled to admit that some buildings are magnificently covered at the present time, as well as magnificently designed and built; but, in our country at least, it is the fact that these buildings are comparatively scarce.

To trace the direction in which improvements and advances have been made in roofing is comparatively easy, so long as the inquiry is restricted to general lines. The question becomes complicated, however, when details are entered into. Restricting the inquiry to the most general terms, the kinds of improvements made in roofing of late years are principally those which cause the same material to be furnished at a less price than formerly, growing out of the substitution of machine work for hand work. A conspicuous example of this is found right here, in Cincinnati, the home of the iron roofing industry. I do not know how many tons of iron roofing are annually produced here; but it is sufficient to say that the industry is second in importance to no other of its general class. To such perfection has the business been carried, that iron roofs are manufactured and sold at a very small advance upon the cost of the material in the flat. Other instances might be cited, an extreme case being the comparison of the price of shingles, at the present time, with those known to a previous generation. The sawn shingles of the lumber regions of the North cost but a trifle compared with the slabs laboriously wrought by axe and draw-knives fifty and one hundred years ago, when the eastern and central parts of the country were on the outskirts of civilization.

Another phase of the improvements and advances that have been made in roofing, is the better knowledge that exists at the present time concerning the materials that are used for roofing and their behavior under adverse conditions. The technical knowledge of roofing manufacturers and those who make a business of laying roofs at the present time is far in excess of that of any previous age of the world. Roofing in all the leading branches of the trade is no longer an experiment, but it is reduced to a definite science and results can be accurately predicted.

While dwelling upon the improvements and advances made in roofing, I should be doing an injustice to a large class among the practical roofers of the country, and those engaged in handling roofing materials, if I did not refer to the improvements which have taken place, in the last few years, in tin plates. Formerly it was almost impossible to buy a respectable roofing plate, no matter what price the roofer might be willing to pay, nor how carefully the architect drew his specification. Now I am persuaded that the very best quality of plates can be obtained without difficulty. Carrying the inquiry a little further, and carefully questioning those who handle roofing plates constantly, I am assured that better plates are being imported at the present time for roofing purposes than were ever brought to this country before. One evidence of this is in the fact of the guarantees which importers unhesitatingly apply to their plates, and the care with which they brand individual sheets and mark the weights upon the packages. All this indicates good faith and is a matter of congratulation to the building trades at large.

The conditions under which roofing, to be satisfactory, must endure in this country are extreme. Take it in the Northwest, for example, say in the climate of Minnesota. In summer it is not unusual for the thermometer to range as high as 90 degrees; while in winter the mercury falls as

low as 40 degrees below zero. Here is a range of not less than 130 degrees difference in the temperature, producing expansion in summer and contraction in winter, which test roofing material in a way that is easier imagined than described. Hence it follows, that materials which are entirely satisfactory in the South, where there is practically no winter at all, fail utterly when they are used in a climate such as I have described. On the other hand, it is possible that precautions that mechanics in the Northwest are obliged to take in laying roofs would not be necessary, were the roofs laid where less variation of temperature prevails, or where there is less cold weather.

In my own experience, covering a period of a number of years, I have found metal roofs, using the term broadly and without reference to the manner of laying, less successful in the Northwest, than I believe them to be in the East and in the central and southern portions of the country. This I attribute to the strain upon the seams, or the fastenings, incident to the variation in the dimensions of the metal, on account of the changes in temperature, and we never recommend their use in the Northwest except on roofs of steep construction. On the other hand, what are known as composition roofs, and especially those of genuine Trinidad asphalt for semi-flat surfaces, the first of the kind being laid in St. Paul as far back as 1879, have given excellent satisfaction; and where roofs of this kind are laid as they ought to be laid, by which I mean with due provision in the construction and framework of the building itself, they come nearer answering a satisfactory purpose than any other material that I can describe. Coal-tar pitch roofs, if laid of the very best material of the kind, and properly applied, have also features of excellence. Pine-tar roofs have been used to a certain extent, but they are of a character which, so far as my observation has extended, I cannot recommend. It is, as I am informed, customary, if not necessary, to provide a mixture of resin and lime, with the pine tar, in order to give it sufficient body for successful use; and it seems to me that it would require a long argument to convince anyone that, of these ingredients, lime is of any advantage as a roofing material.

In the use of composition roofs—by which term I refer broadly to those roofs employing a felt saturated and covered with cement and finished with sand or gravel—much depends upon the quality of the individual ingredients and the care with which the work is performed. This may be considered a truism, and something that with equal propriety might be said of every other roofing material; but it seems to me to be specially applicable in this direction, and it is to this, perhaps, more than to any other one thing, that successful roofers in the Northwest owe their prestige.

I would not be understood as condemning metal, or more particularly iron roofs. What I have said concerning this material is more in contrast with other materials which seem to answer a better purpose, under the peculiar conditions of the climate in the Northwest, than as an absolute criticism of their fitness for use. Iron roofs have their place; and in the finish of grain elevators, in the roofing of car sheds, or warehouses requiring roofs of steep pitch, they answer a most satisfactory purpose. I might make similar allusion to other materials less conspicuous as candidates for general favor, but it is scarcely necessary to occupy time in that direction. In passing, there is one matter to which I would direct attention, and which, perhaps, is of special interest to this body, and that is, the practice of warranting roofs. It is the custom, in St. Paul and vicinity, to warrant roofs against everything except mechanical injury. The warrants are so broad that, in many instances, even a mechanical injury is made the basis of a complaint against the roofer upon the part of the house owner. Carelessness upon the part of the householder is often the cause of the leak in a roof, for which the roofer is held responsible. A case in point will illustrate my meaning: I inspected a roof, some time since, which was complained of as leaky. Examination showed that the leak came from a scuttle, the cover of which was lying upside down, some ten feet from its proper place, and half full of water. Still another instance may be referred to: In a certain case a roof was damaged by stones falling upon it, thrown from a blasting operation carried on in an adjoining lot. Numerous instances have come to my knowledge where the roofing was cut through by tools used in cleaning away snow. Where guarantees exist, householders and tenants seem to be careless in what is done to the roof. A suit has recently been threatened, regarding a roof which has made trouble under somewhat peculiar circumstances. The roof is inclosed by fire walls and it has comparatively little fall. The snow banks up between and next the walls above the roof line and flushing, and, as the building is heated, this snow naturally melts from the under side. An examination of the roof revealed the fact that nearly eighteen inches of water were standing on it, caused by the outlets being stopped with ice and the heat from the under side melting the snow. Continual freezing and thawing, incident to such a condition of affairs, is a strain upon a roof scarcely paralleled in building operations. In this case it is evident that under the system of warranting roofs, the roofer is held responsible, in part at least, for a defect in the original plans. It is the custom in the Northwest for coal-tar roofs to be warranted for five years; natural asphalt roofs for ten years, and metal roofs to be warranted for three years. I think this custom is unreasonable; and if it exists in other parts of the country, I suggest that it would be to the advantage of builders and roofers alike, if this organization should set its face against such a custom. I am in favor of the roofer being held responsible for his work, but not beyond a term which is sufficient to define the actual quality of the work performed. I think the limit of responsibility should be no longer than one year, irrespective of the kind of roof. The fact that natural asphalt roofs are warranted for a longer term of years than metal roofs and coal-tar roofs combined, is evidence of their quality and the confidence which their layers have in them.

One strong argument for limiting the responsibility of roofers to a short period of time, is the saving to them of trouble and annoyance in caring for and inspecting roofs, for injury incident to concealed facts. If the householder or tenant can put the responsibility of a leaky roof upon the roofer he will certainly do so rather than bear the responsibility himself, even though he is solely at fault. Imperfect building construction frequently damages roofs. For example: A building may settle so as to

move the roof timbers, and this will cause the roof to crack, or break, or tear away from the walls. Certainly the roofer, who had nothing to do with providing the foundations of the building, nor yet in designing or superintending its construction, should not, in justice, be required to keep such a roof in repair, free of cost to the owner.

And now to sum up, we would remark that the roof of the prehistoric period, the roof of interlaced twigs and branches, that of thatched straw or of clay and sod, all had their uses and advantages no doubt, and chief among these may justly perhaps be considered their simplicity. So far as advised the practical roofer in thatch or sod was not much hampered by specifications requiring a particular brand of sod, or an especial gauge of straw. It made little difference to him, and perhaps less to the supervising architect, whether he used "Old Method" or Common I. C.

Just imagine the artisan of that, to us, early period of the world's existence, talking about the "Old Method" or the "Old Style" brand of roofing materials, or Noah, gravely insisting that none but "Straight Pitch" must be used, and no "cut back" should go onto his pleasure yacht. Far be it from me to insist, however, that these primitive styles of roofing were in all things superior to those of the present day. We roofers, who are members of this association, wish it understood that, like the widow, who in six lines announced the death and funeral of her late husband, and that she would continue his business at the old stand, we are still ready to take contracts for modern forms of roofing, and if you insist upon a warranty, would suggest that the members of this association and affiliated bodies, are generally, financially and otherwise, able to make a guarantee good.

The Progress and Advancement in Plumbing.*

BY J. R. PHILIPS, OF PROVIDENCE, R. I.

PROGRESSION and success go hand in hand, and one cannot be successful without being in some manner progressive. Search the world over, and the fact will come back to you, if not with added force, at least with striking realization, that our most successful merchants, manufacturers, professional men, and mechanics, are those in whom the most prominent trait is progression.

This assertion, more than ever, holds good of plumbing in its true sense, and if, as some assert, plumbers are successful, in a pecuniary point of view, I must as confidently say, that they are at the present time as progressive, probably more so, than the average mechanic.

Plumbing is indeed a progressive science; few realize the rapid strides which have been made during the present generation, few indeed understand the pre-requisites, essentials, and training, which combine to make the competent and successful plumber.

Knowledge acquired from long training and study, experience gained, after continuous and patient research, honest desire for success, a susceptible disposition to accept the results of the investigations of others, have contributed in the make-up of the plumber of the present time.

The plumber of the past was a workman, plain and simple, versed, we might say, almost to perfection in the use of tools and the performance of his work. Beyond this the demands of his business never led him. Every job was done alike, varied by a regard for decorations, and a dexterous manipulation of lead pipe; the demands of his calling made him a plodder, honest and industrious, but as regards new methods, new ideas, obstinate, as a rule.

Today the science of plumbing demands, that the plumber should be not only a workman, but that he shall be a skilled mechanic, and beyond that he shall be familiar, if not from actual study, at least from experience in certain laws of physical science, laws which govern hydraulics and ventilation.

The modern science of plumbing abounds with many examples, which call for the most thorough and complete knowledge of these laws.

The plumber of the past had but to provide the necessary supply and waste pipes, to hide them from view, if such were a possible thing, and to set his fixtures neatly to accord with the construction of the building in which they were placed.

The plumber of today must thoroughly ventilate, not only the traps and the system of soil and waste pipes which he puts in, but also must ventilate the building itself in the most approved manner, insuring beyond the possibility of a doubt security against those poisonous gases, which recently acquired science teaches us we must so faithfully guard against.

He should know the laws of hydraulics, that he can understand the capabilities and capacities of supply pipes, the flow in them under varying heads, the loss due to friction, that allowances may be made for the same.

He should understand and know the principle of circulation of hot water, that the best results attainable may follow his work.

He must combine with these a knowledge of sewerage and drain laying, as applied to buildings, that he may take a commanding part in all that has to do with sewerage disposal, and to them all he must add a trained knowledge of legitimate business for his own protection.

If there has been progression as regards the plumber, there has also been great advancement in the methods of executing plumbing, and also in the manufacture of the stock and material used.

The introduction of water, for domestic purposes, has superseded the force-pump and tank for the cold water supply, although tanks are used in many places where the pressure is too great for safety. Pumping the water was laborious, and the supply was limited. The water stored in the cistern soon became stagnant and unfit for use.

A sufficient supply of hot water is very essential. Years ago the tank or boiler was located at an elevation high enough to supply all fixtures; long pipes connected it with the water-back, circulating the water, when heated. The first change from this open head boiler, or tank, was the construction of what was called the flue boiler, located in the chimney;

the heat from the range fire was carried around the body of the boiler, the flue being so constructed that all the hot gases would be applied directly to it. This boiler was close head, with feed circulation, and return pipes connected at the top, which was exposed. The next was the close head boiler, located near the range, connected to a water-back, or coil, and supplied direct, or from a tank, placed at an elevation above all hot-water fixtures.

Many improvements have been made in the construction of water-closets. The water-closet of forty years ago was the pan closet, supplied from a tank with a service box, connected by wires to the valve, with cranks and ball lever operated by the pull on the seat. The inflow of water to the service box would be more than the service pipe could discharge; that when the valve was closed, enough had accumulated to refill the bowl.

The first improvement on the service box closet, that came to my notice, was known as the Croton. This closet had a chamber, back of the seat, extending up some two or three feet, supplied with water direct, and served as a reservoir for flushing and supplying the bowl.

After the Croton, valve closets were introduced, of which there were many designs; they are operated with a pull on the seat, raising the valve by a stop on the lever, or by a cam on the arbor. These valves are slow shutting, and allow the water to pass through them, flushing the closet until they become seated. The hopper closets have been used very extensively, being operated by means of a hopper cock, or a valve connected with the seat. All of these styles of closets were of cast-iron. The manufacture of water-closets and hoppers, entirely of earthen ware, is a great advance. Many improvements have been made in their construction, artistic as well as useful, some beautifully embellished to make them attractive; supplied with water from a small tank through a slow closing valve operated by a chain and pull, the flushing of the closet is easily and quickly regulated.

The construction of bath tubs has kept apace with the improvements. The tin bath of former days was supplanted by copper tubs of similar form, and these were superseded by wood tubs, lined with sheet-lead, and later with tinned copper. Iron baths are used to some extent. The introduction of porcelain baths, and those of enameled iron, denotes progress, they being clean, neat and durable.

Many changes in the construction of wash basins have been made. To the round bowl, with the common plug, was added an overflow connecting to the waste pipe, and afterward made as part of the basin, connecting directly with the plug. The oval basin was introduced, and more recently the new pattern with standing overflow and plug combined, thereby overcoming the difficulties of plug and chain operated over the slab. There are many devices of this style of basin, which are being brought into general use, and are accepted as a decided improvement over the old form of basins.

One of the most important and essential parts of good and thorough plumbing, and upon which *may* rest the success or failure of the work, are traps for the various fixtures. Perhaps throughout the whole range of plumbing, there could not be found one to which more careful study has been devoted. The former practice was to manufacture the trap to suit each immediate case in question, by bending the lead waste pipe into such form as was needed. Experience has taught us that the trap must be self-cleansing, must resist syphonic action, and there have been introduced many, mechanically constructed, designed to overcome this trouble. The utilization of the "back air pipe" on traps is also an outcome of the desire to insure against syphonage.

Cast-iron soil and waste pipes have come into general use, being more durable, stronger and less liable to corrosion by the action of sewer gas. The heavy patterns were made after the light patterns had been used for years. They are considered preferable, being less liable to breakage in handling and calking. Cast-iron pipes, enameled, have been manufactured more recently, and are receiving some notice. Wrought-iron pipes have been used to some extent of late years, it being conceded that the screw joints are less liable to leak, and are more perfect than the calked joints of cast-iron pipe. The great variety of fittings adapted to the many positions demanded, have been of great benefit to the plumber and his work.

Another important element added to the manner of performing plumbing work, has been the introduction of the principle of ventilation to the systems of soil and waste pipes and traps. The absorption of poisonous gases by the water in the traps, and the chances of their seal, demanded the extension of the soil and waste pipes up and through the roof, to relieve them from the pressure of sewer or cesspool. Back air pipes are also used to assist ventilation and prevent syphonage. Some condemn their use, claiming that traps should be so constructed that under all circumstances enough water should remain in them to insure their seal. Foot vents or fresh air inlets are used to perfect the ventilation of waste pipes, but their use has been condemned by some and extolled by others.

I might say more in regard to the improvements which have taken place in the manner of executing plumbing work. I might go into details and trace the cause and effect of the many changes, but it would be but a reiteration of the facts which would show beyond a doubt that there has been progress in the science of plumbing, which is truly wonderful, and has kept apace if not in advance of the other mechanical trades.

I cannot at this time forbear saying something in favor of the higher education of the plumber. At the present time, the subject of industrial education is being agitated and its methods put in force. I earnestly commend to all, for careful consideration and thought, the needs and necessities for modern plumbing, calling for information and experience of the highest order, and of which the foundation, I am pleased to note, of such a school in the city of Cincinnati has been established.

The plumber's apprentice looks in vain for the chance to obtain such an education. No opportunity is offered for him to learn the theories of the business to which he is to devote himself. He has to depend upon himself, with no incentive, except his own will, to obtain the knowledge which shall make him a good workman. It is true that something was

*Paper read before the second annual convention of the National Association of Builders at Cincinnati, February 8, 1888.

done, and we are now, thanks to the liberality of some philanthropic gentlemen, without example in this respect.

The trade school established in New York has been very successful in supplying the long needed want—a school wherein are taught the principles of mechanical trades, including plumbing. It furnishes such information and practice which cannot be obtained, either from want of time or from the obstinacy of the experienced workman. The interest taken in that school by the master plumbers of that city is commendable. Such schools should be established in every city; it would be a boon to every mechanic, and indirectly to everyone, through better and more intelligent workmen.

Painting.*

BY J. G. MCCARTHY, OF CHICAGO.

PAINTING, like charity, covers a multitude of sins, and like sin, too, it is of very early origin in the world's history. As a further evidence of this idea, it is related that the devil in preparing for one of his periodical visits to earth, had his tail painted a beautiful pea green, so as to appear neat but not gaudy.

The best authenticated record places decoration before dress in the order of time, and throughout the entire history of mankind this order prevails.

Many ancient and modern barbarian nations, with little or no knowledge of dress or clothing, were willing to undergo great physical torture in being tattooed, and races of naked Indians have been found who, quite regardless of physical comforts, were willing to labor several weeks for sufficient pigment to paint their bodies with; also squaws who would come out of their tents without a vestige of raiment on, but would not think of appearing in society without having their bodies painted in brilliant hues; and, indeed, in our own times, lovely woman, and to some extent unlovely man, devotes more time to the painting and decorating of their persons than do they to the comfort and convenience of their wearing apparel.

This idea of decoration prevails in the mental world also, and at the present time the minds of children are dressed as the tailor dresses their bodies—in the prevailing fashion—quite regardless of the utilities of existence, so that it is much easier to find a young man who can conjugate a Greek verb or prattle about protoplasms than it is to find one who is capable of executing a piece of mechanical work in a proper manner.

Our subject, from an historical point of view, or at least the mechanical features of it, are rather difficult to approach or gather data upon, not through the lack of works treating on the matter—for the books pertaining to the subject are legion—but because the great majority of authors thereon deal with it from a purely emotional standpoint, resulting in a greater waste of pure white paper and printer's ink in writing about painting under the head of "fine art" than there is consumed legitimately in dealing with the entire range of mechanical subjects.

We can safely say of a large percentage of the books written on the subject, in the words of Charles Lamb, "No gentleman's library should be without them, and no gentleman should read them."

Thus, at the outset, we are forced to admit our inability to give satisfactory historical information on the subject, as we understand it in the mechanical world, and it is very fortunate that such is the case, for thereby you are spared the agony which always results from interlarding the conventional saws about the Greeks, Romans, and several other very old and respectable people, which generally crawl into papers on any and all subjects.

It is *prima facie* an evidence of great learning, if not of wisdom, to speak and write about Greece and Rome, but we must reconcile ourselves with being radically prosaic and commonplace, and at once endeavor, at the risk of being thought unartistic, to look at our subject from a purely mechanical point of view.

The ideal Madonna of the painter, on canvas, impresses the beholder quite as forcibly with the dignity, chastity and motherly devotion of a good and pure woman, as does the prayerful invocation to the virgin, and the mental agony of Hamlet can be as well depicted by this art as through the burning words of Shakespeare, and again, the good digestion of an Englishman is as vigorously set forth by the painted fish and game of his dining-room frieze as it could be through an exhaustive treatise on his food assimilating powers by an eminent physician. This same fish and game frieze is only one of the many absurdities existing in household decoration, and to such an extent is the idea of conforming the decorative features of a room to its uses carried, that we are told of a painter receiving an order to paint flesh brushes, bars of soap and crash towels on a bathroom border. Another element of so-called decoration is the desire of many unthinking and ridiculous people to interlard their particular vocation or calling in the decoration of their homes, and a case is recorded of a retired army officer who had twenty-six cannon painted on his dining-room walls, at the mouths of which his three elderly maiden sisters were forced to sip their morning tea.

There is not time, nor is this a fitting opportunity for expatiating on the multifarious ramifications of our subject in this respect; suffice it to say, however, that in this, as in all things else, "consistency is a jewel," and compelling the elderly maidens to smell powder, while partaking of their morning meal, is nearly akin to inviting a friend with weak digestive organs to breakfast on tea and toast, in a room decorated with painted fish and vegetables.

"In the elder days of art,
Builders wrought with greatest care
Each minute and unseen part;
For the gods see everywhere."

The nearest approach to a well-developed god, in this respect, among all the building trades at the present time, is perhaps the painter, and we have only to call in the testimony of the other trades to bear us out in this assertion.

* Paper read before the second annual convention of the National Association of Builders, at Cincinnati, February 8, 1888.

The mason who puts down your foundation walls, and in the hurry of modern custom, forgets the exterior cementing, will, in the most complacent manner, tell the owner or architect to have the inside of the wall painted to prevent moisture. The cutstone contractor who puts an invisible patch in the corner of a bond stone, will tell you to have the surface painted for the sake of uniform appearance.

The architectural iron worker, who neglects to work to his drawings in molding the columns and beams, cares not that they are from a quarter to one-half inch narrower than the plans call for, as long as they contain the requisite weight of iron, for the reason that the painter can fill up the space by using the next larger size plate glass, at his own expense, because he has agreed to paint and glaze the building according to plans and specifications, and, by the way, these same specifications contain more combined terror to the average painter than the entire code Napoleon and the common law of England does. The bricklayer, who forgets to fill the spaces between his wall and the door and window frames, in like manner tells you the painter can fill them up with putty; also, the galvanized iron cornice maker, as well as the metal roofer, will economize by leaving their joints unsoldered, because the painter follows after them and can remedy the defects with putty and paint, and it is still an unsettled question whether the skylight leak is caused by defective glazing or through the inferior work of the tar and gravel roofer. The inside of a building also bears evidence of the truth of this idea.

The carpenter, whose specifications call for first clear lumber, which cannot be found, uses the next best obtainable quality, and at once, upon its arrival on the ground, wants the very thing of all others which should not be done, the priming to prevent shrinkage, the only thing it needs to make good lumber of it, attended to promptly.

The plumber, whose iron pipe, with a connection on either end, has been wrongly measured, will saw it in twain, file it neatly, and set it up, strong in his faith that paint will remedy the defect as far as appearance goes.

The plasterer, the position of whose angles bears a striking resemblance to the leaning tower, whose cornice moldings look like an amateur's painting of a New England rail fence, and whose walls, on having the straight edge applied to them, show spaces large enough to pull the biblical rich man through, will tell you the painter can remedy these slight defects when the decorating is being done. An architect who revels in Grecian domes, Roman columns, Moorish fretwork and all the other isms and schisms of the profession, undertakes to utilize the entire category in the construction of the twenty foot front of a suburban villa, to be erected, at an expense of \$700, for the well-known firm of Ten Per Cent & Co., and sold by them on monthly payments of \$15 each month, and when all else is arranged, the architect sits down and writes specifications for the painter about as follows: All the materials, tools and appliances necessary to the full and complete performance of the conditions hereinafter set forth, must be furnished and supplied by the painter. All interior woodwork (floors excepted) of every kind and description must receive one coat of pure gum shellac, cut in pure alcohol, after which it must have four coats of Skin the Painter & Co's best light hard oil finish, brushed on smooth and even, and rubbed thoroughly smooth between each coat, and in the final finish must be rubbed with pumice and oil to a dull smooth piano finish.

For the full and complete performance of the foregoing, it is hereby agreed by and between the parties to this contract, that he (the painter) shall receive the sum of \$57 in the lawful money of the United States.

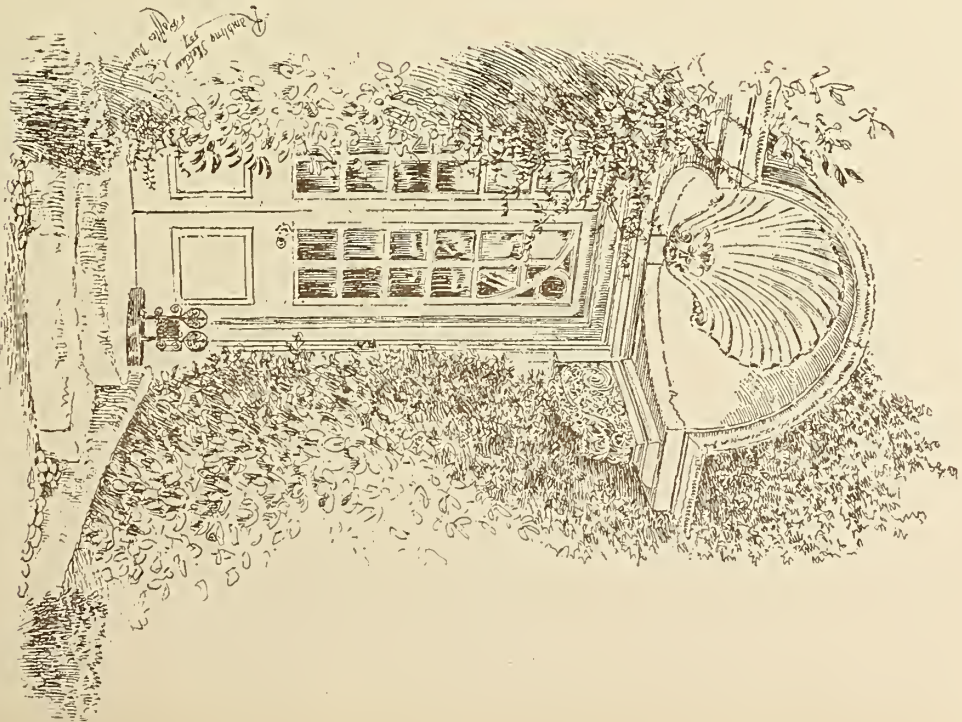
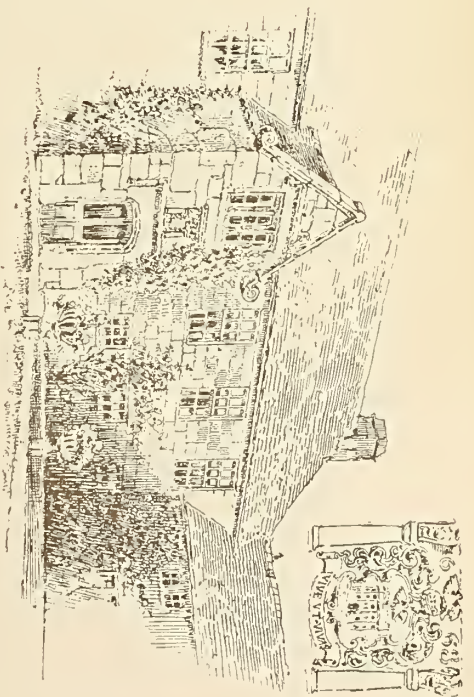
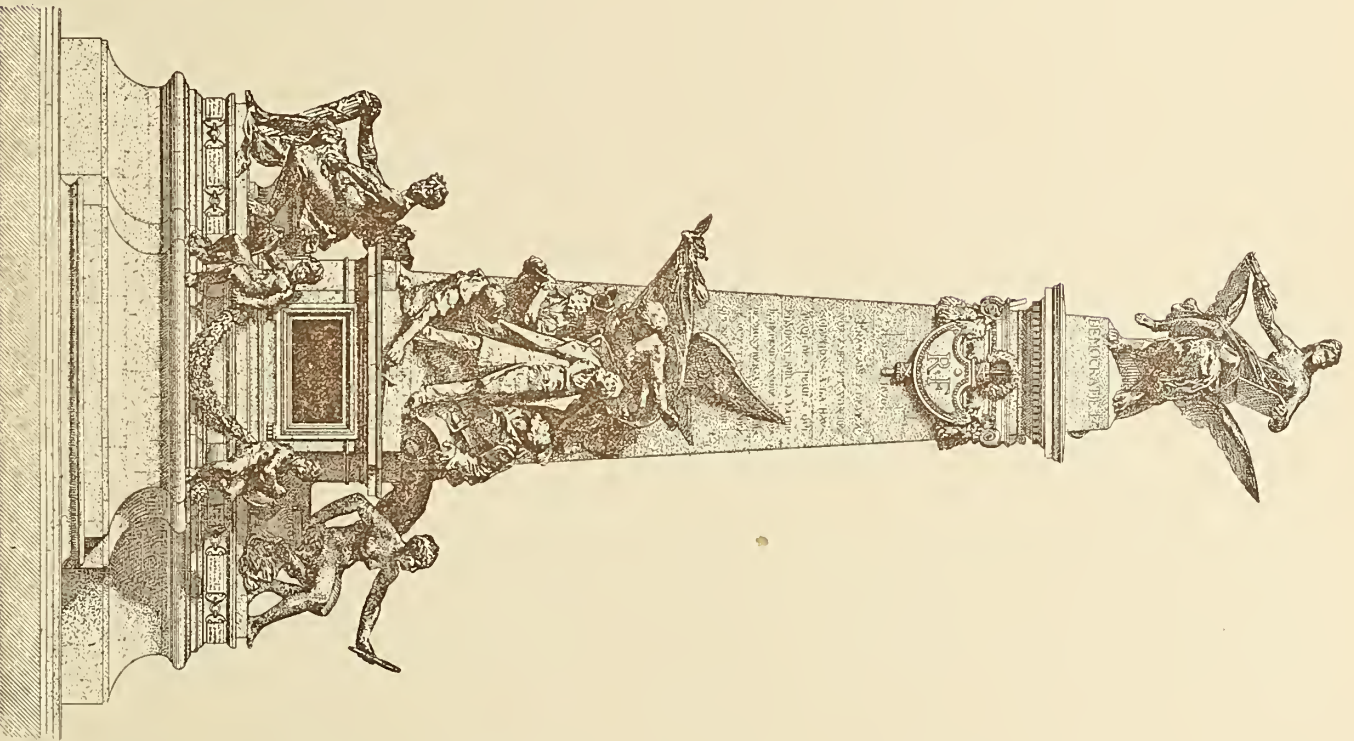
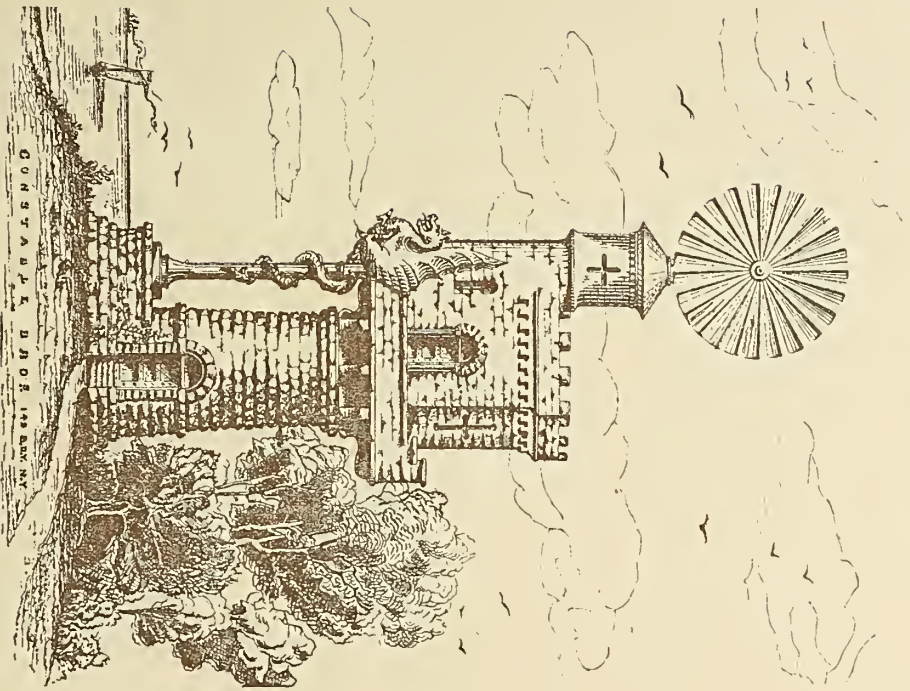
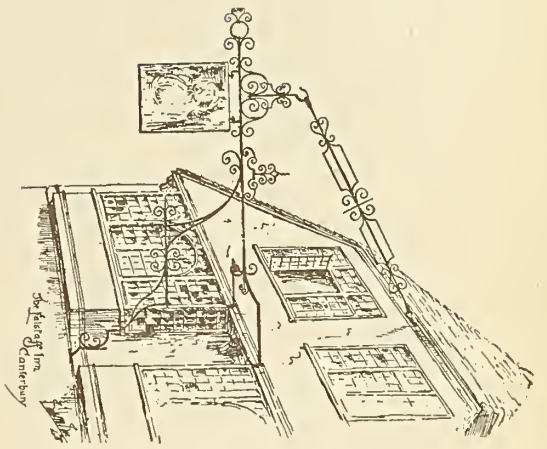
A celebrated unbeliever has said "an honest god is the noblest work of man," and in harmony with this idea, if we must constitute the painter a god with an all-seeing eye in building matters, it is very important to have a god who will fill the letter and spirit of the foregoing definition; but alas! sorry as we are to record it, they do not in all cases come up to this standard.

It is related of a painter who was being brought to task for not sand-papering his work, that he told the owner of the building (a widow lady): "I always put the sand paper in the last coat of paint," and leaving out the paper this is, in many cases, strictly true.

As was said at the outset, the features of the painting trade most interesting, perhaps, to this convention are the hardest to reach, and much as it may be desired, it will be very difficult to give anything like accurate statistics as to the total number of men employed, rates of wages paid, or the position numerically of the trade in the list of building industries of the country. The best recent figures obtainable, place the number of men employed in the house-painting trade in New York City at 9,000; number of firms carrying on the business, 733; amount of capital invested, \$3,000,000; amount of wages per year, \$7,200,000, and average wages, \$12.00 per week of fifty-nine hours. In Chicago there are three hundred firms carrying on the business, and they employ about three thousand men, whose average wages are the same as those in New York City.

Taking these New York and Chicago figures as a basis of computation, in connection with the United States census of 1880, we find that at the present time about four thousand firms are engaged in the business, with an invested capital of \$30,000,000, and employing 100,000 men, whose average wages will be about \$500 per year each, or a total of \$50,000,000 in wages alone for one year; adding to this about \$60,000,000 for material and appliances, we have a total of \$110,000,000 per annum, to which may be added \$40,000,000 for window glass consumed by the trade, making a grand total of \$150,000,000 as the net cost of the painters' annual tribute to the building industries of the country.

This is certainly a sum sufficiently large to justify the public in demanding of the painter such careful and intelligent consideration of these interests as will be commensurate with the expenditure of so large a sum, and it is for this reason that the painter desires to lend his feeble cry in conjunction with the other building trades and professions, through the instrumentality of this National Convention of Builders in endeavoring to bring about a reform of the abuses and questionable acts which are to be met with on every hand by the honest architect and contractor. While respectfully demanding for the painter what he is willing to concede



Cable and Sign of the Falstaff Inn, Canterbury, from the *Journal of Proceedings of the Royal Institute of British Architects*. Windmill: Constable Bros., Architects, New York. Monument to Gambetta, Paris, from *La Semaine des Constructeurs*. The Old Porch, Lanyon, and an old Cornish Doorway, Trewinnard, from the *British Architect*.

to others, the consideration and recognition which his branch of the building industry merits, the painter will ever be found ready to lend all the assistance in his power to this and similar organizations in their honest efforts to place both employer and employé in this branch of the nation's industries, equal to any and second to none other of the many elements which contribute to the greatness and prosperity of our entire country, we will conclude with the words of Longfellow:

"To build, to build,
That is the noblest art of all the arts;
Painting and sculpture are but images,
Are merely shadows cast by outward things
On stone and canvas, having in themselves
No separate existence."

Second Annual Convention of the National Association of Builders of the United States of America, held at Cincinnati, February 7-8-9, 1888.

COMPILED FROM THE OFFICIAL STENOGRAPHIC REPORT FURNISHED THE ASSOCIATION BY "THE INLAND ARCHITECT AND NEWS RECORD," OF CHICAGO.

THE second annual convention of the National Association of Builders held its session in College Hall, Cincinnati, commencing February 7, at 10 o'clock A. M. At the entrance to the hall the arch over the doorway was decorated with flags and evergreens, and across the grouping of flags, in white immortelles, were the words "Welcome N. A. B." In the hall the decorations were profuse and attractive. Above the windows and doors were grouped flags and evergreens, and festoons of evergreens were hung from the corners to the central chandelier. On the platform, which was flanked and framed with a forest of plants, its edges hung with evergreens, were a number of easels bearing framed designs sent by the Cincinnati architects, while in the rear of the hall a large exhibit of architectural work was attractively arranged, all of which were contributed by the architects of Cincinnati.

At the reporters' table were the representatives of the *American Builder*, of Cleveland, and *THE INLAND ARCHITECT*, of Chicago (the only class journals represented at any of the sessions of the convention), Messrs. S. T. Carey, Jr., of the Cincinnati *Enquirer*, Harry C. Miller, of the Cincinnati *Commercial* and N. P. Runyan, of the Cincinnati *Times-Star*. V. J. David, of *THE INLAND ARCHITECT*, was the official stenographer.

President J. Milton Blair, of Cincinnati, occupied the chair, and previous to organization Secretary W. H. Sayward, of Boston, called First Vice-President John S. Stevens, of Philadelphia, and Second Vice-President E. E. Scribner, of St. Paul, to the rostrum, where they occupied seats during the convention.

The secretary also announced as his assistants, William Harkness, Jr., of Philadelphia, and Charles W. Voshall, of Rochester.

The president called the convention to order, and introduced the Reverend Dudley W. Rhodes, who opened the session with prayer.

The president then introduced Mayor Amos Smith, of Cincinnati, who made a speech of welcome. He spoke of the importance of the home, the responsibility resting upon the builder, and gave all a hearty welcome. At the close of mayor's speech he was given three cheers and a "tiger."

The president then in the name of the Builders' Exchange, of Cincinnati, welcomed the delegates, and said that the Cincinnati ladies would coöperate with the members of the exchange in making the recollections of Cincinnati pleasant to the visiting ladies, for whose comfort full arrangements had been made. The president then delivered his address, as follows:

PRESIDENT'S ADDRESS.

Gentlemen of the Convention,—I will ask your attention for a few moments while I briefly review the condition and work of the association, as developed up to the opening of this its second convention. Without specially referring to that first gathering in Boston of a preliminary conference which decided that it was wise to attempt the establishment of a Central Association of Builders—I will touch upon one or two facts in connection with the first convention, held in Chicago last March, which convention consummated most successfully the plan formulated at Boston.

The first convention was largely devoted to organization and the outlining of guiding principles; and in the deliberations of the convention the delegates from twenty-seven of the principal cities of the country took part.

The delegations from two of these cities were evidently displeased with the plan adopted of having the basis of representation come, when possible, from exchanges which represented the combined interests of all kinds of employing mechanics in trades concerned in the erection, construction or completion of buildings. These two cities are the only ones of those represented at Chicago which have failed to respond to the prorata assessment on the ground that the basis of representation was not correct, and even these two may finally obtain representation through other mediums than those present at the first convention.

The wisdom of adapting a basis of representation in the National Association dependent on exchanges or associations in the various cities of the country, which there represent the combined interests of all the building trades, has been more and more manifest throughout the year. We, as builders, are a mixed class, and must always so remain; one of our greatest elements of strength, indeed, lies in this fact, for we are dependent on one another in the common ordinary practice of our trades, and we can no more be divorced from each other in the higher aims and interests of our callings, than we can be in our common, every-day contact in the conduct of our work. We need each other's experience, and we need to consider each other's interests all the way through, particularly in dealing with questions which touch the vital principles of our business life. It is a great safeguard too, in such an association as ours, to have constantly before the mind the diversity of interests, that we may be careful in our acts to do no injustice, avoiding special legislation, knowing well that what may be the healing of one may be the hurting of another. All the varied building trades are indeed one great family, and it would have been the greatest unwisdom to have taken into our councils only a portion of the vast interests which truly belong together. Two or three other cities have failed to preserve their affiliation through lack of thorough organization. To offset these changes there is much to report of an encouraging nature. Cities whose exchanges existed upon insubstantial basis have made important changes in the line of improvement, and others, in which no exchanges existed, have formed them in time to take part in this convention, or are forming them for future work. The whole tone of the exchanges has been brighter, and more interest is being manifested than has ever before been known, in putting associations of builders into effective conditions. Much of the work in this direction has fallen upon the secretary, W. H. Sayward, whose services to this association

have been invaluable, and whose indefatigable labors have made our organization an assured success, and what could not be done by correspondence, has been accomplished by personal visitation and practical aid in the locality needing such assistance.

Much has been done, but the awakened interest is so widespread that much remains to do, and I think that every individual must clearly see, that one of the chief dependencies of the National Association is in well-organized, live associations in every city in the land. Of course, it may be said that a dozen of the principal cities could formulate all action and have sufficient weight to produce a certain result, but even in that event it would not be a wise thing for the smaller cities to be without the aid of thorough local organizations to emphasize and perfect the recommendations of the Central body. But for their own welfare builders in all cities should create exchanges for the purpose of mutual support, as well as for business convenience, and then join the National body for the purpose of adding strength to it, gaining strength from it, and securing a better understanding of all subjects of common interest to builders, by taking part in its conventions, coming in contact with the ablest minds among builders selected from all parts of the country, for the discussion of questions of need and importance to the craft.

There is hardly need, perhaps, for me to emphasize the desirability of exchanges in all cities; that seems to be pretty thoroughly appreciated. The chief thing to do will be to provide information and assistance in forming or reforming these associations upon a sound and substantial basis.

During the year the value of our central organization has been variously manifested, particularly, I think, in its having produced a salutary effect, by keeping in check, through the mere fact of its existence, the widespread blockade of business which was threatened during the winter.

There has seemed to be a hesitancy upon the part of labor organizations to advance with quite so pronounced effrontery as before the establishment of our body and the announcement of its principles. Our existence, too, has given strength to other organizations of employers outside of our particular circle, and we have been a benefit to others where, perhaps, we had no anticipations of being serviceable. Upon one occasion, in particular, our bond of union has proved most effective.

When Chicago was made the field of one of the hardest and longest struggles that any of the builders of the country have ever endured, from every city of our affiliation came quick messages of approval and words of cheer, words and approval that never would have appeared had it not been for our association together and the friendship and mutual support established.

To Chicago also went the Executive Board of the National Body, at the request of the Chicago Exchange, to examine the situation and give such counsel and support as might be possible in the emergency. It would be unfair to the indomitable courage of the Chicago builders to say that they could not have got along without this support, or that the result was more pronounced on account of the visit of the officers of the National Association, but it can fairly be said as a statement of common fact, that such a visit, made at such a crisis, was invaluable in the moral support and stimulus conveyed. It has been truly said that brave soldiers would frequently run away from a battle if it were not for the other soldiers being present to witness their cowardice; so it is a great element of strength with any group of builders, in any city, to know that their associates in other cities are looking with earnest solicitude upon their action and depending upon their courage, and especially is this fact an element of strength when these groups of builders in other cities are recognized not simply as men in the same general line of business, but as men who are members in common with them of a central association, an association which has sent its officers to confer with and encourage them.

Chicago's builders did yeomen's service for our cause, and in the final settlement established a principle of arbitration which has the germs, at least, of justice and right and peace, and suggests the means which may properly be adopted for averting the constant disaster to which the building trades have for many years been subjected. There have been no other cases where the good services of the National Body, during labor troubles, have been so prominently exerted as in Chicago. St. Paul has had an irruption, but of comparatively short duration, and the National Executive was not summoned. The other cities in the country have been free from anything general in the nature of labor troubles, and I am inclined to argue that the existence of our "National Organization" has been to some extent responsible for this freedom.

In October last, learning that the Western Association of Architects were to have a meeting of their Executive Committee in Chicago, and that about the same time the American Institute of Architects were to hold their annual convention there, I appointed a special committee to obtain a hearing before both bodies, if possible, upon the subject of uniform contracts.

This meeting was obtained, and the subject was discussed in all its bearings, the result of which will be placed before you in the report of that committee. I shall not be anticipating the report, perhaps, in saying that one result of the meeting was readily discernible in the increased respect with which your representatives were received, when their matured and definite views on the proper requirements of contracts were placed before these committees from the architect's associations. Your other committees have met and been frequently in communication during the year, and the result of their work has, to a certain extent, already become known to you through the printed reports which have been distributed to all exchanges, in order that there might be ample opportunity for consideration. This seemed a wise proceeding, in view of the importance of the subjects treated, and it is no doubt with prepared minds that you will discuss these valuable reports. You do not need to be reminded again by me of the relation you stand in as builders toward the great industrial problems of the day. You are well aware that you are indissolubly connected with them, and it should be in the full conviction of your importance as a factor in these greatest of questions that you take up those branches of it which come nearest to your life work.

To me, it seems as though in this particular crisis that we stand in a relation of peculiar power in the fixing of the tone of the industrial harmony, and upon us depends (more than the wisest of us are aware) the future of American youth, in guiding it toward those industrial pursuits which in their ultimate perfection may properly be called arts. They have almost become "lost arts." Let us do our best and wisest towards recovering them and placing them high in honor.

Gentlemen of the convention, a year ago the National Association of Builders was an unknown quantity; its very existence was problematical, and its capacity for usefulness a matter of theory. Today, at the opening of its second annual convention, its life is full and vigorous, its composition pregnant with principles of growth and its usefulness already acknowledged by every community of importance in the land.

A year ago the work of our first convention was substantially a work of organization the establishment of structural lines upon which we were to build in the coming time, and in the setting up of a "declaration of principles" by which we were to be guided.

In our deliberations at this second gathering of delegates, we are to survey the work that has been done by our officers and committees during the year just passed, and in the light of their research and our united experience grapple for the first time as an association with questions of grave importance not only to our own special interests, but to the welfare of the nation and the age in which we are living.

We are to approach these questions as practical facts, and not as glittering generalities. We are to consider them definitely and in detail as the actual problems of our business life, upon a correct solution of which our successful existence depends.

We cannot be too deeply impressed with the serious character of the work before us, for the value of our labors will largely depend upon the intelligent comprehension of the difficulty of our task.

This is no time for mistakes. A tremendous constituency is watching us with solicitude, and a single error may be productive of widespread confusion.

We must also constantly bear in mind that other interests beside our own will be largely influenced by our action. They, too, are waiting anxiously, and will weigh carefully whatever we may do; and, while we may be assured of their ready support and active coöperation in wise action upon our part, we may just as confidently expect they will frown upon and discountenance immature conclusions, arbitrary assumptions or coercive measures. Gentlemen, the business of the convention will now be taken up.

The President: Gentlemen, we are now ready for the business of the convention, which will be first, the appointing of a committee on credentials.

On motion of A. J. Campbell, of New York, a committee of five, to which were added the three secretaries, was appointed by the chair.

Committee on Credentials: Andrew J. Campbell, of New York; W. C. McPherson, of Philadelphia; George Tapper, of Chicago; A. McAllister, of Cleveland; Thomas B. Ross, of Providence; William H. Sayward, of Boston; William Harkness, Jr., of Philadelphia; Charles W. Voshall, of Rochester.

The chair stated that the president of the Cincinnati Exchange sent an invitation to visit the new Exposition Buildings and Music Hall; also an

invitation from the local exchange to visit the theaters in the evening and a masquerade ball; also from the Young Men's Mercantile Library, tendering the use of their rooms to delegates.

The session then adjourned to 2 o'clock P. M.

FIRST DAY—AFTERNOON SESSION.

The session opened promptly on time, President Blair calling for the report of the Committee on Credentials.

This report, presented by A. J. Campbell, chairman of the committee, to which is added the full list of alternates and visitors, as reported to the assistant secretaries by the chairman of the delegations, is as follows:

BOSTON, MASS.

Delegates—B. D. Whitcomb, Asa H. Caton, Thomas Parker, L. P. Soule, D. B. Badger, Leander Greely, William H. Sayward.

Alternates—David McIntosh, Lyman D. Willcott, Ronald A. Stewart, Ira A. Hersey, John A. Emery, Melville C. Grant.

Visitors—Mrs. David McIntosh, Mrs. L. D. Willcott, Mrs. R. A. Stewart, Mrs. Thomas Parker, Mrs. J. A. Emery, Miss A. J. Grant, Miss Lucy Lauriat, Mrs. Asa H. Caton, Mrs. W. H. Sayward.

BUFFALO, N. Y.

Delegates—Jared H. Tilden, Michael McNamara.

Alternate—James A. Churchyard.

CHARLESTON, S. C.

Delegate—D. A. J. Sullivan.

CHICAGO, ILL.

Delegates—George C. Prussing, George Tapper, Joseph Downey, James John, D. V. Purrington, J. G. McCarthy, F. V. Gindele, Murdock Campbell, Matt Benner, Adam J. Weckler, William Goldie, Charles W. Gindele.

Alternates—W. H. Iliff, P. B. Wight, M. W. Powell.

Visitors—Mrs. Joseph Downey, Miss Ida Klein, Mrs. James John, Mrs. C. W. Gindele, Mrs. W. H. Iliff, Mrs. M. W. Powell, Mrs. P. B. Wight, R. C. McLean, editor INLAND ARCHITECT.

CINCINNATI, OHIO.

Delegates—J. Milton Blair, L. B. Hancock, H. E. Hollzinger, Archie Colter, William H. Stewart, J. E. McCracken.

Alternates—Isaac Graneson, Samuel J. Tappin, Frank S. Rohan.

CLEVELAND, OHIO.

Delegates—Thomas Simmons, A. McAllister, R. H. Jenks, C. C. Dewstoe, L. Dantrel.

Visitors—Mrs. Thomas Simmons, W. J. Watterson, Fred Houghton, editor *American Builder*.

COLUMBUS, OHIO.

Delegates—Thomas Knauss, W. H. Slade.

Alternates—Wm. H. Fish, Edward Herbert, J. H. Lloyd, F. W. Boyle.

DENVER, COLO.

Delegate—C. J. Smith.

Alternate—F. K. Stinson.

EAST SAGINAW, MICH.

Delegate—Michael Winkler.

Alternate—John H. Qualman.

GRAND RAPIDS, MICH.

Delegates—John Ramson, W. C. Weathuly.

Alternates—James Curtis, I. H. Hoskin, W. C. Hopson, H. E. Divan, John Harmouth.

INDIANAPOLIS, IND.

Delegates—W. P. Jungclaus, J. C. Adams, J. C. Pierson, J. S. Farrel.

Alternates—James Shover, E. Metzger, F. Woelke, John Martin, H. Howland, August Kuhan.

Visitors—Mrs. James Shover, Mrs. F. Woelke, Mrs. W. P. Jungclaus, Mrs. E. Metzger.

KANSAS CITY, MO.

Delegates—L. B. Cross, William Taylor, George W. Youmans, J. W. Fairman.

Alternates—William Stewart, Frank Scheneke.

Visitors—William Taylor, Jr., H. P. Stewart.

LOUISVILLE, KY.

Delegate—John E. Carpenter.

MILWAUKEE, WIS.

Delegates—Thomas Mason, Garrett Dunck, Richard Smith.

NASHVILLE, TENN.

Visitors—D. S. Wright, Mrs. D. S. Wright.

NEW YORK CITY.

Delegates—John J. Tucker, Marc Eidlitz, Albert G. Bogert, Andrew J. Campbell, John McGlensey, William Hurst, A. S. Dickinson, George Moore Smith, George H. Smith.

Visitors—Mrs. J. J. Tucker, Mrs. J. A. Jarvis, Mrs. A. G. Bogert.

PHILADELPHIA, PA.

Delegates—John S. Stevens, William Harkness, Jr., George Watson, David A. Woelpper, George W. Roydhouse, Stacey Reeves, William C. McPherson.

Alternates—Charles H. Reeves, F. M. Harris, A. H. Williams, W. B. Irvine, Peter Gray.

Visitors—John Boyd, Edwin Cubberly, E. F. Morse, James Milnamon, Joseph Brown, David Watts, A. B. Barber, John T. O'Brien.

PROVIDENCE, R. I.

Delegates—John W. Briggs, George R. Phillips, Thomas B. Ross, Richard Hayward.

ROCHESTER, N. Y.

Delegates—C. W. Voshall, J. H. Grant.

SIOUX CITY, IOWA.

Delegate—Fred F. Beck.

ST. PAUL, MINN.

Delegates—E. E. Scribner, E. F. Osborne, J. S. Burris, Asher Basford.

Alternates—S. P. Spater, J. S. Homans.

Visitors—Mrs. E. E. Scribner, Mrs. E. F. Osborne, Mrs. Nelson Stelle.

SYRACUSE, N. Y.

Delegate—James E. Baker.

WASHINGTON, D. C.

Delegates—David J. Macarty, John E. Simms.

WORCESTER, MASS.

Delegates—H. W. Eddy, C. D. Morse, O. S. Kendall.

Alternate—G. A. Bomard.

On motion the report of the Committee on Credentials was accepted and the committee discharged.

The roll was then called, seventy-four delegates answering to their names.

The secretary then announced that resolutions should be presented in writing, and in duplicate, for the convenience of the secretary and the press, and would, after reading, be referred to the Committee on Resolutions without discussion.

The President: The offering of resolutions is now in order.

George Watson, of Philadelphia, presented a communication from his exchange, inviting the National Association to hold its next convention in Philadelphia. The communication was referred to the proper committee, together with one of similar character from Denver, Colorado.

The following gentlemen presented resolutions:

A. J. Campbell, of New York, preamble and resolutions regarding the elimination of the word "master."

The secretary read a communication from Corresponding Secretary Randall, of the National Brickmakers' Association, relative to the adoption of a standard size of brick.

D. V. Purrington, of Chicago, offered a preamble and resolution, asking that a special committee be appointed by the chair to confer with the Executive Committee of the National Association of Brick Manufacturers.

George M. Roydhouse, of Philadelphia, presented a resolution regarding the collection of information in connection with the different branches of mechanics who are also contractors.

J. G. McCarthy, of Chicago, offered a resolution.

All the above resolutions were referred to the Standing Committee on Resolutions. The following resolution was presented by John E. Simms, of Washington, D. C.

Resolved, That this National Association of Builders recommend to the United States congress and to the several state governments (i. e., all the states that are represented in the association), the establishment of mechanical trade schools in the cities of 100,000 or more inhabitants, and that this association appoint a committee of five to draft this resolution for submission for action by the United States congress and the state governments. Said committee to submit with the resolutions:

1. As to the qualification of applicants.
2. The kind of trades they are to be instructed.
3. Length of time for said instruction to the junior and as to the issuance of diplomas at the expiration of the allotted time, and as to the preference given to said juniors by master mechanics and the time they are to serve their final apprenticeship.
4. The probable cost of workshops, machinery, tools, etc., and the maintenance of said schools.
5. And also as to how they are to be managed and by whom.
6. Said committee to prepare and submit in full their report to all associations represented in the convention for approval or rejection, and if approved by the majority of the said association, the said association will proceed at once to have their state government to take action upon the same, and the committee will submit resolutions to the United States congress.

Finally, said committee to report at the next convention what progress has been made.

This was also referred to the Committee on Resolutions.

On motion, a committee of five was appointed by the chair to present names of candidates for officers and place of next convention. The chair appointed George Watson, of Philadelphia; Leander Greely, of Boston; L. B. Hancock, of Cincinnati; George C. Prussing, of Chicago; John McGlensey, of New York City.

The secretary stated that through the circulars, etc., sent to the different exchanges throughout the year, the members were aware of all the secretary's report would contain.

The treasurer's report was next in order, and Treasurer John J. Tucker, of New York, submitted a report in detail of which the following is a summary: Receipts, \$4,976. Expenditures, \$4,604.20. Balance on hand, \$361.80. The report was received and referred to the Auditing Committee, who subsequently reported it to be correct.

The President called for the report of the Committee on Statistics, and the following report was submitted by George C. Prussing, of Chicago:

GENTLEMEN,—Your Committee on Statistics beg leave to report that it has communicated with all the exchanges of the various cities represented in the National Association, and has heard from most of them in reply. Whether the formulation of inquiries was too vague to be understood, or whether the gentlemen requested to answer them did not take time sufficient to think the matter over before they replied, or whether, as in the cases where your committee was not honored with an answer, it may be that the parties appealed to differed from your committee in his estimation of the value of statistics in general, or the value of such statistics as he personally might have supplied in particular, it is not for us to say. Perhaps all these various causes contributed. We acknowledge receipt of very intelligent replies from a number of cities. But your committee is not in possession of full and exhaustive information on any one of the numerous subjects sought to be covered by their inquiries, and of possible interest to the members of the association, and finds itself obliged to make this report in general terms rather than an army of statistics, which, under the circumstances, could not help but be misleading. All shortcomings in this respect will be remedied by our successors, where the object of gathering these statistics will be better understood and appreciated, and the proper person may be selected in each city to gather them, and who (do not forget it)

will send them to headquarters for digestion and compilation promptly within the first ten days of January.

From a careful review of the reports on hand, which are submitted herewith, your committee find:

1. That the year 1887 has been a particularly busy one for builders everywhere, largely exceeding the previous season in the amounts of money expended.

2. That while the prices of labor have slightly advanced, building materials have been sold lower and the work has been done cheaper. In the larger centers this movement has been so pronounced that in a number of trades here represented profits were wiped out entirely and actual loss resulted.

3. That in some of the cities mechanics and laborers are still employed by the day and its fractional parts, instead of by the hour, as recommended by the last convention of this body, and as has proved so fair and satisfactory to both employers and employes where introduced. From some localities the practice to pay for time not expended in labor on Saturdays is reported.

4. That the number of hours work per day varies in the different cities, and varies also among the different trades in the same city. While the movement for the establishment of eight hours as a day's work among the mechanical classes has been successful thus far in few localities, and is nowhere established in all trades and manufactures, it is plain that a shortening of hours of employment to less than ten per day is looked upon favorably by the public everywhere, particularly in the North, and that this will be one of the legitimate benefits derived by the wage-worker from the introduction of the manifold forms of labor-saving machinery in all departments of industry.

5. That a satisfactory system of apprenticeship does not exist in any of the trades and in no section of this broad country, and that the ways and means to be adopted to furnish proper instruction to our future mechanics is being recognized more and more as one of the burning questions of the hour.

6. That strikes are still the favorite method of protesting against and seeking redress for any abuses existing or imagined, and have been resorted to quite frequently during the last year both East and West. By far the greatest strike among building employes, both as regards the number of persons affected and in its duration, occurred in Chicago. The immediate cause, trivial in itself, was a resolution passed by the Bricklayers' Union, demanding that the men be paid weekly and on Saturdays, instead of, as heretofore, every two weeks on Tuesday, coupled with the threat to strike unless complied with at once. Chicago was too busy to stop for argument. The manner of presenting this last demand, as much as the subject matter thereof, caused people to stop and ask: When this is granted, what next? If this, by quiet compliance, is admitted to be within the province of a trades union, where can a line be drawn hereafter? The demand was refused. The strike began. Employers in all other building trades, as well as manufacturers of building materials, felt that the time had come to test the power of trades unions, and that their interests and those of the immediate employers of strikers were identical. Architects and owners of buildings in process of construction seconded the efforts of builders. From a strike the struggle had become a lock-out. All building operations were practically suspended from May 10 until June 11, 1887. This is not the place to give details, particularly as they have been preserved in pamphlet form, now in the hands of the members of this convention. But your committee desires to call attention to the manner of final settlement of this strike; the first effort to carry into practice that portion of the declaration of principles issued at our first convention, which says: "That while, upon fundamental principles, it would be useless to confer or arbitrate, there are still many points upon which conferences and arbitration are perfectly right and proper, and that upon such points it is a manifest duty to take advantage of the opportunities afforded by associations to confer together, to the end that strikes, lockouts, and other disturbances may be prevented." When the time was ripe, i.e., when all concerned, through losses sustained, had become convinced that the arbitrary action of neither can, or should, govern the other, an effort at arbitration of existing difficulties was made, and consented to by both contending parties. A committee of five was appointed by each side with full powers to represent and act for their respective bodies. These committees organized themselves into a joint committee by electing a judge, widely known for his sterling qualities and impartial fairness, as its chairman and umpire. And after a week's session of this committee, during which every point brought before it was fairly considered and disposed of, the result of its labors commended itself to both parties immediately concerned, as well as the public at large, to such an extent as to meet the approval of all. As a result of this action both organizations, the employers and journeymen, adopted amendments to their by-laws, providing for the regular annual election of a standing Committee of Arbitration, with full power to "hear all evidence in complaints and grievances of a member or members of one body against a member or members of the other, or of one organization against the other, referred to it by the president of either organization, and which shall finally decide all questions submitted, and shall certify by the umpire such decisions to the respective organizations." And further: "Work shall go on continuously, and all parties interested shall be governed by award made or decisions rendered; provided, however, that work may be stopped by the joint order of the presidents of the respective associations until the decision of the joint committee is had." Since the adoption of this plan no further trouble has arisen. The walking delegate found no further employment as such. All questions submitted have been promptly decided and disposed of. Only seven months have elapsed, and it may be too early to decide finally on the wisdom and sufficiency of the system, but those best acquainted with its workings believe it a step in the right direction, and recommend its adoption in all cases where employers and employes are sufficiently organized to make it practicable as a means of avoiding the hitherto oft-recurring and aggravating labor troubles. The excuse of your committee for taking so much of your time in relation to this strike, and without mentioning the numerous labor disturbances in other sections, must be found in the fact, that the one enlarged on is the one from which practical results were gained, and by which a better understanding was established between employer and employe. Both saw and acknowledged that their interests are identical—that both are component parts of one whole.

In conclusion, and because of tender sympathies for our unknown successors, we would respectfully suggest that better results may be obtained by abolishing the special Committee on Statistics, and charging the secretary with the employment and supervision of talent specially trained and fitted for the intelligent compilation and digestion of facts reported from our various cities. In the hands of the proper person the field covered may be greatly enlarged, and the statistics so gathered will become both interesting and valuable. Respectfully submitted.

The report of the Committee on Arbitration was received with enthusiasm, and ordered filed.

President L. C. Goodale, of the Cincinnati Chamber of Commerce, was here introduced by the president, and made a speech in which he extended a general invitation to delegates to visit the board. The invitation was accepted with a vote of thanks.

The report of the Legislative Committee on Insurance was then submitted by its chairman, Marc Eidlitz, of New York, and read by the secretary as follows:

INSURANCE.

GENTLEMEN,—Your Legislative Committee, to whom was referred the resolutions to prepare a plan of insurance for workmen against injuries by accident, and the securing annuities to workmen who may be permanently disabled through the infirmities of old age, offer the following report:

That they have fully considered the subject and find there are insurance companies who issue general policies to be maintained by the employer from collections made from the different employes, which will afford the employes and their families a benefit in case of death.

Allowance is made for all those who may leave their employ, or who may be sick, and in this way the employer has to pay a premium equal only to such amounts as he collects from the men.

The policy covers the men at all times whether at work or elsewhere. New men are insured as soon as employed, and their names placed upon the schedule.

A contribution of 15 cents per week will secure the benefit of \$4 per week, and \$500 to the family in case of death; 20 cents per week, \$6 per week and \$500 in case of death; 25 cents per week, \$7.50 per week and \$750 in case of death.

Special attention is called to the fact that the employer, by adding to the premium which he collects from the men such amounts as he may feel inclined, will increase the benefit to his employes.

There is no doubt in the minds of your committee, that, whenever this matter of insurance is agitated by the builders of the United States, and a demand for such an insurance created, that enterprise will soon take up the subject and companies be organized to meet the demand.

Your committee recommend that the various local exchanges take up the subject and endeavor to put the same in practical use, and for their information the officers of the National Association should print this for distribution to all affiliated associations.

On motion the report was received and discussion postponed till the afternoon session.

The following report of the Committee on Uniform Contracts was presented by E. E. Scribner, of St. Paul, chairman, and read by the secretary:

GENTLEMEN,—The importance of employing uniform contracts in all building trades in the different sections of the country has been acknowledged by both architect and builder for years.

The American Institute of Architects in convention, some years since, appointed a committee to investigate and report on the practicability of formulating such form of contract. At your first convention in Chicago, in March last, you adopted a declaration of principles which says, in Article IV: "This association affirms that all blank forms of contract for building should be uniform throughout the United States; that such forms of contract, with the conditions thereof, should be such as will give the builder, as well as the owner, the protection of his rights, such as justice demands; that whenever a proper form has been approved by this association, after consultation with the American Institute of Architects and the Western Association of Architects, we recommend its use by every builder and contractor."

The Western Association took up the subject also, and appointed a special committee on this subject.

In October last the American Institute of Architects met in annual convention in Chicago, the present headquarters of the Western Association, and your president appointed the undersigned a special committee to represent this organization at that meeting. The special committee representing the three bodies named above, met in Chicago for a full discussion of the matter. Messrs. Blair and Sayward were present, and lent us their valuable assistance. After considerable discussion, all agreed on the desirability of instituting the proposed reform, and were convinced of its practicability, sufficiently to desire a continuance of committees by their own bodies, "to prepare and adopt in such committee of conference a form of contract properly protecting the interests of owner and contractor," and "that the said committee be vested with power to print the form of contract that may be agreed upon by the said committee of conference, and distribute the same to the individual members of all associations represented, with a recommendation for its adoption."

Both organizations of architects passed resolutions as quoted, and appointed as such committee of conference:

Messrs. O. P. Hatfield, of New York; J. H. Windrim, of Philadelphia; Alfred Stone, of Providence, to represent the American Institute of Architects, and Messrs. S. A. Treat, of Chicago, J. F. Alexander, of Lafayette, and Sidney Smith, of Omaha, to represent the Western Association of Architects.

Unfortunately it has been impossible to have a meeting of the joint committees since its appointment, although considerable correspondence has been had on the subject.

Your committee believes that general good will result from this movement if persisted into a final consummation, but of necessity it will take time to accomplish the result desired.

We therefore recommend the appointment by the president of a committee, with like powers as given to the committees representing the American Institute and the Western Association of Architects, as detailed above.

Respectfully submitted,

EDW. E. SCRIBNER,
GEO. C. PRUSSING,
P. B. WIGHT.

The report was referred to the Committee on Resolutions.

The convention then adjourned to 9:30 o'clock A.M.

SECOND DAY—MORNING SESSION.

The convention was called to order by the president at 9:30 A. M., according to adjournment, and opened with prayer by the Reverend Doctor Joice, of Cincinnati.

The President: The first business in order is a paper by J. C. Adams, of Indianapolis, on brick making. (Mr. Adams' paper is printed elsewhere in this issue.)

J. J. Tucker, of New York: I move the thanks of this association be tendered Mr. Adams for his able paper, and that it be ordered printed with the proceedings of this convention. The motion was unanimously carried.

The President: The next in order is a paper on plumbing, by J. R. Phillips, of Providence, R. I. (Mr. Phillips' paper appears elsewhere in this issue.)

J. S. Stevens, of Philadelphia: I move that we return our thanks to Mr. Phillips, and that his paper be included in the published report of this convention. It was so ordered.

The President announced the discussion of the several reports of the Legislative Committee. The first in order, that on the rules and conditions under which estimates should be submitted by contractors in the building trades, was read.

On motion of George Watson, of Philadelphia, the report was taken up and discussed section by section. The discussion occupied all of the morning session, and was extremely interesting, as it most fully developed the existing relations between the architect and contractor. The principal discussion was regarding the insertion or elimination of the word "details." Upon Section 1 being read by the secretary, George C. Prussing, of Chicago, moved its adoption as read, and a member moved to amend by inserting the word "details."

Marc Eidlitz, New York: Mr. President, I do not think it would be possible, in very many cases, for architects to have the details ready at the same time the plans are. In most cases the details are only large crude sketches in pencil or charcoal made as aids in working the plans, and I am sure such a demand would not be entertained if made, and I do not think we should request of other parties more than we could reasonably expect, as they properly do. If we get plans and specifications made in ink, which we ought to insist upon as a matter of justice, and which the architects will grant when the subject is properly presented, it is as much as we should ask for.

J. S. Stevens, Philadelphia: I do not think it advisable to incorporate the word "details" in the section. I do not want to make a demand which I am certain would not be complied with. I hope gentlemen will be very careful in considering the report of the Legislative Committee and particularly this portion of it. The proposed section recommends that the members of the several exchanges shall refuse to make estimates unless the conditions named are complied with—a proposition I do not feel will receive that general endorsement it should have, emanating from this body. It is, therefore, very important that we send out nothing that will fail to meet its purpose. What we desire and ought to have is simply to have plans submitted to us that are intelligible and that will make all concerned stand on equal ground.

John J. Tucker, New York: Mr. Stevens has very properly brought to our attention that we must not ask too much. We must not forget that

this is only the second convention of this association, and we should not jeopardize its welfare by any inconsiderate action. Still we should demand our just rights, and the time has come for us to expect them. We have too long suffered from the abuse of them, from architects throughout the various cities of the land. Now, in this first section, we only ask to be allowed to run our own business instead of letting the architects do it for us. It is as little as we can ask to have plans and specifications submitted to us made in ink or some indelible process. I think the committee have rightly phrased the section, and am in favor of letting it remain as it is.

Matt. Benner, Chicago: I simply rise to say that I coincide with those who complain of the incompleteness of information furnished by architects as a basis of estimates. It is well known that in ornamental ironwork, that in a majority of cases the architect will give a small sketch-drawing and say the work is to be thus and so, and you figure upon that basis; but when he gives you working details you find them something entirely different from what you were led to believe when you figured on the work. I have figured upon work that in this way amounted to twice the estimate on account of the different character of work called for by the details. I hold there should be something specific furnished by the architect, showing just what is wanted in the first place.

Secretary Sayward: A word has been dropped in my ear which leads me to make a statement which may correct this discussion. The intention of the committee in drafting these rules was not to have them arbitrary measures. For many years builders have been satisfied there was something wrong in the method of making estimates. The committee believed the time had come to correct this matter, but they did not wish to ask this convention to accept their conclusions unless it saw fit to do so in the best judgment of its members as to put them in better form, so that an adopted rule of this association expressing the demand can be presented to the architects, to their local organizations, where they exist, or in places where there are none to get them together, and say: Here we have certain rules which were adopted at our national convention, and which we believe are just and right. Come and discuss the matter with us and help us to put the matter on a proper business basis. It is well known to everyone who has bid on work, that it is nearly impossible to get details at the time of making estimates. As a general thing, architects do not know exactly what the details will be at the time plans are made, so that they may say that it is impossible to comply with our request, and by insisting on this thing, we may throw the whole overboard.

M. Benner, Chicago: The gentleman from Boston has said that the architect does not know, at the time his plans are made and submitted for estimates, what his details will be. Now, if the architect does not know what he wants, how can the builder expect to know?

After some further discussion, in which sections 1 and 2 got decidedly mixed; on the motion being put section 1, as amended, was adopted.

Section 2 was changed to conform with section 1 as amended and adopted.

Sections 3, 4, 5, 6, 7, 8, 9 and 10 were adopted as read.

Section 6 was generally discussed, the general opinion developed being that the specifications should mention everything shown in the plans.

On this point George C. Prussing, of Chicago said:

Mr. Prussing: Mr. Chairman, I do not know that I understand the committee as to the meaning and extent of section 6. It is well known that there are certain parts of a building shown on plans and never mentioned in the specifications. Does the committee mean that these parts shall be left out of estimates? That nothing shall go into estimates not shown on plans? For instance, the plans show chimneys, and the specifications say nothing about them.

Secretary Sayward: I do not consider that point well taken. They may not detail in every way the face or slant of the chimney, but in some way they are referred to.

F. V. Gindele, Chicago: A plan might show there is to be a chimney in a cutstone wall, and it may be mentioned that a certain chimney is to be furnished, but the plan not showing how it is to be constructed the estimate is made in the dark. It might refer to a chimney to cost \$100 or \$1,500. It should be referred to in the specification or not estimated upon.

Mr. Mason, Milwaukee: I think this one of the most essential matters in the report. The carpenter must have a general draft of whatever is to go into the house, in order that he may make an intelligent estimate, as there are so many little things left out of the specifications that should be in.

After some further discussion, participated in by D. A. G. Sullivan, of Charleston, C. W. Voshall, of Rochester, Leander Greeley, of Boston, on motion of J. J. Tucker, of New York, the section was adopted.

Section 8 was generally discussed.

Marc Eidlitz, of New York: I believe this is simply a part of the specification and can be dropped.

T. B. Hancock, Cincinnati: I am in favor of this article as it reads. I am a plasterer by trade. The architects of Cincinnati put in their specifications that the plasterer shall, after the completion of a building, make all repairs after the plumbing, steam-fitting and other trades have mutilated his work. Now he has no means of knowing what cutting will be done. I am in favor of making every man who cuts and destroys in a building responsible for the damage done.

C. W. Voshall, Rochester: I am strongly in favor of passing the section as it reads. It will make each more careful when they know they have to pay for the damage they do.

John McGlensey, New York: I am heartily in favor of the section as read. It proposes that we shall settle among ourselves for the injury done each other's work, and act honorably one with another. Talking about plans you cannot estimate upon what the electric light man or plumber may do. I have an instance in mind where it did an amount of damage that cost me to repair four times the amount of the original contract.

The article was further discussed by Marc Eidlitz, of New York, who thought damages for work destroyed should be covered by special contract, Thomas Parker, of Boston, M. McNamara, of Cleveland, and others.

Wm. H. J. Hurst, of New York, finally moved to amend by inserting the words "original plan" after the word "another." This amendment was lost and the original motion carried.

The discussion ended with section 12, when the session adjourned to two o'clock, at which time the discussion would be resumed.

SECOND DAY—AFTERNOON SESSION.

The president called the convention to order at 2 P.M., fifty-six delegates answering to roll call.

The discussion upon the rules for estimates was resumed, and the following rule (section 22) was discussed and added:

SECTION 22. Under no circumstance should bids be amended after being opened, and bidders to whom work has been awarded shall sign the contract or withdraw.

This was passed, the secretary being instructed to make the wording more comprehensive, if possible, without altering the sense.

The reconsideration of several of the sections passed in the morning session occupied a large portion of the session, and the amended report was adopted as a whole, eighty-three delegates answering to the roll call, seventy-nine of which voted in the affirmative, three in the negative.

The amended report and rules are as follows:

RULES FOR ESTIMATES.

The Committee on Legislative Matters have conceived it to be within their province to prepare, for the consideration of the National Association, certain rules or conditions which contractors may properly require to be observed by owners, architects and builders when estimates are to be made.

The action they desire is simply this: That the National Association recommend all its affiliated bodies to adopt these rules in cooperation with the architects in the various cities, and require their members to decline to estimate, unless their provisions are conceded, as a basis upon which bids are to be submitted.

The committee hope by this means to correct some of the improper practices that have prevailed in the past, and secure a nearer approach to honest and fair dealing by and between builders as well as between architects and builders.

Respectfully submitted,
MARC EIDLITZ,
LEANDER GREELEY,
WM. HARKNESS, JR., } Committee.

Rules and conditions under which estimates should be submitted by contractors in the building trades.

1. General plans, details and specifications, when offered for final or competitive estimates, should be presented, on a scale not less than one-eighth of an inch to the foot, should be done in ink, or by some process that will not fade or obliterate, and be complete in every part.

2. Such portions of the drawings as require a larger scale than general drawings, for a thorough comprehension of what will be demanded, should be so presented.

3. Specifications should be definite.

All such indefinite demands as "The contractor must furnish all work that is necessary," or "All work that the architect may require," are improper, and should be eliminated before estimates are submitted.

4. Estimates should not be given to cover an indefinite depth of foundation.

Foundations which have to go below the depths shown upon plans should be paid for as extra work at prices agreed upon.

5. The specification should be taken as the guide for estimating; and all demands made by the specification — unless objection be made thereto in writing when bids are submitted — should be covered in the estimate offered.

6. Demands made by the plans, and not referred to in the specifications, should not be considered in the estimate offered.

7. Everything that will be required in the various branches of work should be mentioned in the specification, classified and grouped under appropriate headings.

8. Specifications should distinctly state that when it is necessary to cut or change the work of one mechanic in the placing of the work of another, then the said cutting should be done by the mechanic whose work is so changed or cut, he being paid therefor by the mechanic whose work makes the said cutting necessary.

9. Contractors, when required to estimate for work involving any or all the sub-contracts, should not be restricted as to whom they shall employ as sub-contractors unless previously notified.

10. Should portions of the work be reserved by owner or architect, and estimates therefor obtained by them, the principal contractor, if required to include the said sub-estimates in his contract, should receive a compensation therefor of not less than 10 per cent on the amount of said sub-estimates.

11. In all cases where work is let under plans and specifications prepared by an architect, for which estimates have been received and opened, the lowest invited bidder should be entitled to the contract, and estimates for changes should only be made by him unless the said changes involve a complete alteration in the plans, and then the full competition should be again opened.

In no case should the two lowest bidders be called upon to estimate ordinary changes to decide which is entitled to the contract.

In case the price estimated for changes should not be satisfactory to the owner, it should be settled by arbitration.

12. Invited bidders should receive due notice of time and place of opening of bids. Bids upon being opened should be immediately displayed to the inspection of all bidders, and for a period of three days thereafter.

Contracts should be awarded by owners or architects within a reasonable time (say ten days) after a competition is closed.

Contractors should not be holden on estimates retained longer than ten days before deciding to award contract.

13. Should all solicited bids received be refused, then the lowest bidder should be entitled to compensation as follows. For estimates amounting to

\$5,000 and under.....	\$ 25.00
\$5,000 to \$50,000.....	50.00
Over \$50,000.....	100.00

No compensation for estimates should be required where the contract is awarded to the lowest bidder.

14. When security is exacted from a contractor, a like amount of security should be required of the owner.

15. Sub-bids, when solicited by the architect, should not be shown by him nor exhibited in his office, but should be retained by the architect until the competition is closed and principal contracts awarded, when they should be disposed of in the way and manner provided in these rules, viz: added to principal contracts (with a percentage—see Rule 10), if agreeable to principal contractor—or direct contracts made.

16. A principal contractor having been awarded a contract involving sub-contracts, his estimate having been based upon sub-estimates, or bids which he has solicited and received, he should award the said sub-contracts to the lowest bidders, and should notify the sub-bidders that their estimates have been accepted or rejected as soon as the contract has been awarded to him. The fact that such sub-bids were received by the principal contractor previous to the submission of his estimate should be conclusive evidence that they were used by him.

17. Should a principal contractor receive a sub-estimate unsolicited, he should not be considered under obligation to use the said bid, even if it be the lowest; but he must not reveal the bid, nor use it in any way to influence any other party.

18. Any member detected in trading on any of the sub-bids, whether they be solicited or unsolicited, or however knowledge of them may have come into his possession, will be liable to forfeiture of membership, censure or suspension.

ADDENDA.

19. Contractors should decline to give architects or owners estimates in the aggregate when the said architects or owners are soliciting estimates in detail; nor should estimates be furnished in detail when estimates are being solicited in the aggregate.

20. Whenever the completion of a contract will be required in a certain time, then that time should be mentioned in the specifications; and if a penalty for non-completion is to be exacted of the builder, it should be so stated, and also that the owner will be

required to pay a premium of like amount to the builder if the work is completed before the specified time.

21. Under no circumstances should bids be awarded after being opened, and bidders to whom work has been awarded shall sign the contract or withdraw.

The following resolution was presented by Mr. Hearnese, of Detroit, and read by the secretary:

Resolved, That the members of the several exchanges are hereby recommended to urge upon the architects of their respective cities the adoption of the rules for making plans and specifications in this convention adopted.

The resolution was adopted as read.

The report of the Legislative Committee on Apprenticeship was next taken up. It is as follows:

APPRENTICESHIP.

Your committee, in whose charge was left that important question known as the apprenticeship system, have thoroughly reviewed past methods in their relation to present conditions; have visited manual training schools existing as adjuncts to schools of technology, or as departments of the public school system; have inspected the celebrated mechanical trade schools, established and maintained in the city of New York by the philanthropy and liberality of Col. Richard T. Auchmuty; have had the privilege of a lengthy interview with the generous founder, and make the following report:

We find that the old system of apprenticeship, under which the boy who wished to learn a trade was "indentured," or "bound out" to an employer for a term of years, has been gradually falling into disuse from natural causes, until scarcely a vestige of it remains.

In our opinion there is no encouragement for a revival of this old system, for the following reasons:

Fifty, and perhaps even twenty-five years ago, the employer in the building trades worked with his own hands, and being continually present, could give proper instruction to the apprentice. He took the boy to board in his own house, and to a certain extent had an oversight of his habits, and could control his general conduct to the end that a good mechanic should be the result.

The situation to-day is widely different. Employers seldom work at the trade, for the reason that there is a great increase in the volume of business, and because new and quicker methods of work have become so desirable and necessary that the time of the employer is fully occupied in attending to business details and in general direction; he seldom or never takes tools into his own hands or remains long enough upon actual work to instruct in that practical way which was possible formerly.

The apprentice is left, therefore, largely in the charge of the workmen. Foremen or other employes give such general instruction as may result from their good nature, or sense of duty to the boy or to their employer.

It is a fact which cannot be disputed that there is at present no such thing as regular or systematic teaching, the apprentice being left to "pick up" his trade instead of having it taught to him.

We are strongly of the opinion that the tendency of modern methods of conducting work will always be away from those general conditions which made possible the "old apprenticeship system;" and this opinion, together with the fact that under broader opportunities for education there is, undoubtedly, a much higher grade of intelligence today than in the past, and the fact also that trades are subdivided much more than formerly, so that greater proficiency is required in the various branches, leads us to the conclusion that apprentices must be taught and mechanics made, in the future, by entirely different methods from those in vogue under the system referred to.

These new methods may be briefly described as a combination of schooling pure and simple, and practice pure and simple; or, in other words, of a course of schooling under regular instructors (the schooling to be paid for the same as any technical course is paid for in other professions) and a course of practice, under employers, on actual work, which practice or service shall receive appropriate wages.

These two courses will form a comprehensive and complete system, which, when fully understood and thoroughly operated, will produce a better class of mechanics than the present no-system, or the past hap-hazard system, and will leave as little to chance as possible.

The first step will be the establishment of mechanical trade schools, whose definite purpose shall be to give preparatory instruction in the science or technique of trades to young men who intend to follow mechanical pursuits for a livelihood, this preparation to be supplemented and followed, and the education completed by a term of service on practical work under actual employers, which term shall be of shorter duration than usual on account of and by virtue of the preparatory course in the trade school.

While we admit that "Elementary Manual Instruction" as already introduced to some extent in the public schools, is valuable to the ordinary scholar (inasmuch as it may cultivate a certain amount of manual dexterity and create a taste for mechanical pursuits), we are still strongly of the opinion that for the practical training of young men who intend to be mechanics, special instruction must be had in mechanical trade schools as an intermediate course between the public school and that actual service with the employer where his education will be completed and from which he may graduate as a journeyman.

We believe that these practical mechanical trade schools should *not* be a part of the public school system, but should be established and maintained by private enterprise.

We also believe that these schools should not be established or maintained exclusively by any distinct association of builders, but are emphatically of the opinion that such associations should cooperate with them, and indeed that such cooperation is necessary to insure their success as the first stage in the education of the mechanic, as well as to establish the fact that builders recognize the school as part and parcel of the new system.

The legitimate and proper method of cooperation in this system, as far as associations of builders is concerned, should be by encouraging private enterprise to establish these schools; offering to assist pecuniarily until they become self-supporting; agreeing to give preference of employment to graduates from the schools; joining in the management by appointing committees to approve methods, and examine students in establishing their proficiency, which shall entitle them to certificates of graduation.

We are convinced that there is abundance of capital that will quickly be invested in enterprises of this kind as soon as associations of builders demonstrate a belief in their practical value by lending aid in the way suggested.

We recommend that the National Association of Builders approve of the following detailed method to take the place of the old apprenticeship system and secure its approval and adoption by all filial associations as rapidly as possible, to the end that mechanics may be taught upon our own soil and American boys given the best opportunity possible to become proficient in the building trades.

Method approved by the National Association of Builders to establish the right of any person to be known as a regular journeyman in the building trades.

1. The serving of a regular course of instruction in a mechanical trade school and graduating therefrom with a certificate of proficiency granted by the same, under rules and regulations approved by a committee of master mechanics, who may unite in the management of the said school.

2. Service for a term of practice with an employer on actual work, this term to be at least one year less than the usual term of apprenticeship by virtue of the holding of a certificate of proficiency granted by a mechanical trade school. During this term of service the young man to be known as a "junior."

3. The completion of the education of the mechanic to be acknowledged on the part of the employer by the issuance of a certificate from the association of builders to which the employer may belong, which shall state that the holder has passed through the prescribed course at the trade school, and the term of practice with an employer (name and location given) with satisfaction and credit, and is entitled to be received by all builders as a journeyman.

Respectfully submitted,
MARC EIDLITZ,
LEANDER GREELY, } Committee.
WM. HARKNESS, JR., }

J. J. McCarthy, of Chicago, moved that the report be taken up section by section.

M. McNamara, of Buffalo, moved to amend that it be adopted as a whole.

The amendment was carried.

Apropos to the apprenticeship report the secretary read the following letter from R. T. Auchmuty, president of the Mechanical Trade School, of New York:

61 UNIVERSITY PLACE, February 3, 1888.

W. H. Sayward, Esq.:

Will you be kind enough to let me know what action is taken in the Apprenticeship Committee's report at the national convention, and should you attend it I would be glad if you would mail me any newspapers giving a report of the proceedings. Should the report be adopted and the delegates earnestly attempt to make it carry out its provisions, this convention would be the most important meeting of the kind that has been held in the United States.

Yours truly,
R. T. AUCHMUTY.

A motion to reconsider the report was again put and prevailed, and some important discussion took place.

Wm. Harkness, Jr., of Philadelphia, stated that the committee, in formulating the report, had made a distinction between manual and mechanical instruction, believing that manual instruction should form a part of the education of the public schools, and that mechanical instruction should be acquired from master mechanics and supported by private rather than public enterprise.

John A. Stevens, Philadelphia: I agree with the committee in this much, that I believe it is the duty of those who have charge of our public school system to educate, in a manner, the hand as well as the head. We all know that there have been a great many changes taken place since my venerable friend, George Watson, was a little boy and went as an apprentice to his trade. At that time it was considered sufficient if a boy started off with an education consisting of the three R's. Then he was ready to go to his trade at the age of fourteen, fifteen or sixteen years, at least. He lived with his master and learned his master's trade. Now, with the great advance made in science and the mechanical arts, it becomes more important to have a higher education. It is not sufficient for a lad of today, who wishes to learn his trade, to understand merely his arithmetic and multiplication table; he must know higher mathematics; able to read French and German books, and publications and authorities in the different departments of the mechanical arts and trades. Now we can't crowd all this into a boy's head in six years, but this we can do: we can supplement in our public schools the education of the brain by that of the hands, so that by the time he is eighteen, he will have an education that will be equivalent to two years' apprenticeship under the old system. My idea is that when a lad comes out of school he will be prepared to become a mechanic, to attend some such school as Mr. Auchmuty has established in New York, and on which he is spending large sums of money to educate our boys in the mechanical trades. That if the education of the brain is supplemented by that of the hands by competent teachers in our public schools, our boys could attend trade schools in the evening, if need be, and if this was to begin now, in ten years we would have a better class of mechanics than we have ever had in this country. Now we have to depend on the foreign countries for our workmen, who come in the spring and go back in the fall, taking away with them money that should be kept at home. Then we would have a high grade of American mechanics to do the work of this country.

George C. Prussing, Chicago: I believe the distinction between manual and mechanical training has not been brought forcibly enough before the country, and, therefore, I hope this report will be published and the subject forced upon public attention.

Secretary Sayward: I would say as a matter of fact that nearly \$90,000,000 have been expended every year on the public education of the country, and that but a very small percentage of this large sum has gone toward the cause of those who desire to learn something in relation to the mechanical arts. I believe much more of this vast sum should be devoted to the youths of the country who ought to be let to follow the vocation of mechanics.

After further discussion by M. Benner, of Chicago, J. G. McCarthy, of Chicago, and others, the question on the adoption was put to the convention and passed unanimously.

The president announced as the next order of business a paper on carpentry, by William Goldie, of Chicago. (The paper is printed elsewhere in this issue.)

On motion, a vote of thanks was tendered Mr. Goldie for his excellent paper, and it was ordered published and spread upon the minutes of the association.

The report of the Legislative Committee on Lien Laws was read by the secretary, as follows:

LIEN LAWS.

Your committee has made a thorough examination of the bearing of the various lien laws of the different states and territories, and, after discussing the question at great length, submit the following as their report:

To form a lien law that should be complete in all its parts, correct in legal points, and applicable to existing conditions in the various states, is manifestly a difficult if not an impossible undertaking. We have therefore confined our conclusions to such general points as we deemed suitable in all localities and which all lien laws may properly comprehend.

In our deliberations we have divided the subject into questions and first considered—

1. "Is it desirable to have a lien law?"

This question we decided in the affirmative, for the reason that while there may be opportunities for fraudulent dealing and questionable transactions either with or without a law, that there will be greater freedom from such practices under a law which shall comprehend certain fundamental principles of protection, than without any law at all.

The next question considered was—

2. "Can lien laws be made fairly uniform in the different states and territories?"

This we decided in the affirmative, for while other statute laws of the various states may make it necessary to extend the time in which liens may be made, or to alter legal phraseology, the fundamental principles remain the same and laws can be so framed as to be identical so far as the protection of certain interests is concerned and should be made so as soon as possible.

The next question was—

3. "What interests should be protected by lien laws, and what should be the order of preference?"

This query we answered as follows: Personal labor actually performed upon the property should unquestionably have prior rights over all other claims.

The next in order should be the interests of sub-contractors, or, in other words, persons who may furnish labor, or labor together with material, either by contract or otherwise, to a general contractor, who furnishes or performs work direct for an owner.

The next interest should be the interest of the individual furnishing labor or material, or both, direct to the owner, either by contract or otherwise.

The next and last interests to be protected are those of persons furnishing material to a direct contractor.

The next question considered was—

4. "Should property be responsible under the lien law for claims amounting to more than the unpaid balance of an existing contract with the owner for the erection of the whole or any part of the building?"

To this we answer:

Property should be subject to liens to the extent of the original amount of existing contracts under which the work was done or material furnished, whether payments have been made on the contracts or not, but in no case beyond the amount of the contracts.

The last question was—

5. "Should the taking of a note deprive one of the right of lien?"

We answer as follows:

The acceptance of a note which falls due beyond the limit allowed for filing liens should certainly create forfeiture of the right of lien. Builders should be wise enough not to take notes falling due beyond the lien limit.

To briefly recapitulate the points which we believe should be, and can be incorporated in all lien laws, we say that lien laws should be made uniform in so far as they protect certain claims and in the following order:

First. Personal labor actually performed on property subject to lien.

Second. Labor furnished, or labor and material furnished by a sub-contractor.

Third. Labor or material, or both, furnished direct to owner, either by contract or otherwise.

Fourth. Material furnished to a direct contractor.

We suggest that the National Association take this action simply—recommend all filial bodies to petition the Legislatures in their several states to have their lien laws so drawn or amended as to afford protection upon the four fundamental points above rehearsed, and that all clauses conflicting with these principles be expunged, to the end that all lien laws may in their principal conditions be uniform.

Respectfully submitted,

MARC EIDLITZ,
LEANDER GREELY, } Committee.
WM. HARKNESS, JR., }

ADDENDA.

Mr. Harkness suggests the changing of certain words in the answer to the fourth question, namely: In the first line of the answer strike out the words, "original amount of existing contracts under," and substitute the words, "value of the building upon;" also, strike out in same section the last word "contracts" and substitute "value of building."

On motion, the report was adopted, as read, without discussion.

The next business in order was the reading of a paper on painting, by J. G. McCarthy, of Chicago. (The paper is printed elsewhere in this issue.)

On motion, a vote of thanks to Mr. McCarthy was unanimously passed, and his able paper ordered published and spread upon the records of the convention. The session then adjourned to 9:30 A.M., Thursday.

THIRD DAY—MORNING SESSION.

The convention was called to order promptly at 9:30 A. M. President Blair introduced the Reverend Doctor George Thayer, who opened the session with prayer.

After roll call, at which seventy-four delegates were present, E. E. Scribner, of St. Paul, read a paper on the improvements and advances made in roofing. (The paper is printed elsewhere in this issue.)

On motion of Mr. Adams, of Indianapolis, a vote of thanks was extended to Mr. Scribner for his excellent paper, which was ordered printed as a part of the convention proceedings.

The report of the Legislative Committee on permanent arbitration was read by the secretary, and the discussion, which followed, was lead by George C. Prussing, who was followed by representatives from almost every delegation. The principal argument was upon Section 1, as it assumed that each city had an organization of journeymen similar to the exchange. This section was amended so as to cover special or general organizations of employers and employes. After having been discussed and adopted section by section, on motion it was adopted as a whole as follows:

PERMANENT ARBITRATION.

GENTLEMEN,—Although not specially directed so to do, the Legislative Committee desire to present for the consideration of the convention their views in regard to the position which should be taken by the National Association on the labor question, and respectfully submit a plan for permanent arbitration, hoping that the convention may take action thereon which will secure the adoption of a uniform method of treating labor matters among builders in those cities of the country which are affiliated with the National Association.

The success of any plan of arbitration must depend primarily upon the coöperation of employers with their workmen in some comprehensive manner in order that the plan may be practically effective.

Your committee, therefore, consider that wherever in any city there may be an organization of workmen existing under fairly good government, it would be wise to first attempt to utilize such organization for the purpose of the coöperation referred to; and that where no such organization exists, or where the existing organization may be lacking in the elements of strength necessary to warrant its recognition, then the plan may be set up on its own merits and recourse to it offered by the employers to their individual workmen whenever occasion may demand its services.

This establishment of a plan of arbitration should be thoroughly advertised, so there may be no excuse offered by any parties that a means of peaceful solution of disagreements is not at hand.

This method or plan depends for its chief strength upon the existence of exchanges or associations of employing builders, harmonious enough to arrange the details for their particular cities upon the general plan here set forth, and who recognize that concerted action is essential to any successful efforts in this direction. This plan cannot be adopted by individual employers; it must be by associations of employers.

The best effect will be realized where exchanges representing all kinds of building trades take the matter in hand; and where these do not exist, then the same idea should be followed by special trade organizations with the same end in view. Where exchanges exist, one arbitration committee with interchangeable parts, so to speak, may act for all trades, while if special trades, acting separately, it would necessitate a committee on the part of each trade and much more detailed and greater complication would ensue.

To illustrate: An exchange existing in any city or town may come to an understanding with any reputable association of workmen that a mutual standing committee on arbitration be established, with any number upon each side that may seem desirable, presuming that a small number will always be preferable to a large number.

This committee to be appealed to by either employer or workmen, and if a special trade, in which the difficulty may exist, should not happen to be represented upon the standing committee, then the committee may add to its numbers, to put it upon a proper footing to consider the questions to be brought before it. Thus a method through an exchange of general association will secure to the special trades their proper consideration, and the general interest of all the trades will also be considered and protected. There is one general principle also, the recognition of which is absolutely essential to the success of this plan or any plan of arbitration, and that is the fundamental principle of individual liberty, upon which our association is founded.

With this statement of our views we offer the following plan, in suitable form for adoption by exchanges or associations, with such alterations or modifications as may be necessary by conditions existing in various cities:

PERMANENT ARBITRATION.

*1. It is hereby agreed by the.....(association) of.....city.....state, and the.....(labor association) of.....city and.....state, that a committee of arbitration shall be established for the purpose of settling all disputes and differences by and between the building employers connected with this exchange and their workmen, and no strike or lockout shall occur until reference is had to this committee.

2. It is understood and agreed that this committee is established upon the basis of individual liberty, namely that no workmen shall refuse to work with other workmen, because they do not belong to certain societies; that no workman or association of workmen shall adopt any boycott against materials in any way, shape or manner, and that no employer or association of employers shall adopt any boycott against workmen on account of their affiliation with societies, or black-list them on that account. Workmen or employers adopting such pernicious practices will be denied the privileges of this system of arbitration.

3. This committee of arbitration shall consist of three persons, on the part of the association of employers, and three on the part of the workmen; and they shall serve for the term of one year from the date of their appointment or until their successors are appointed. In event of the trade which may make application for the services of the committee not being represented by persons in that trade, on the said committee, then the committee shall have power to add to their numbers such proper persons to represent that trade on behalf of either employers or workmen, or both, as they may deem fit. In event of the committee being unable to decide upon any question in dispute, then they shall have power to select an umpire.

4. This opportunity for peaceful arbitration may be taken advantage of by builders outside of the membership of this association, or by workmen not members of any labor organization, upon application and consent of all parties interested.

The secretary again read the report of the Legislative Committee on insurance, which was adopted as read without discussion.

George Watson, of Philadelphia, chairman of the Committee on Nominations and place of holding the next convention, read the committee's report.

Place of holding next convention, Philadelphia.

Officers for the ensuing year:

For President—S. Stevens, of Philadelphia, Pa.

First Vice-President—E. E. Scribner, of St. Paul, Minn.

Second Vice-President—John J. Tucker, of New York City.

Secretary—W. H. Sayward, of Boston.

Treasurer—George Tapper, of Chicago.

On motion of George C. Prussing, of Chicago, the gentlemen named in the report of the committee were elected to the respective offices by acclamation. This vote included the place of holding the next meeting, as named by the committee.

President Blair invited President-elect Stevens to the platform, and, after listening to a felicitous speech from that gentleman, in which he commented on Cincinnati hospitality, and thanked the convention for the honor conferred upon Philadelphia in appointing the next convention to be held there, and upon the Philadelphia exchange in making one of its members president of the national body, the session adjourned to two o'clock P.M.

THIRD DAY—AFTERNOON SESSION.

The convention was called to order at 2 P.M., sixty-six delegates answering to roll call.

The first order of business being the report of the Committee on Resolutions, the secretary read the report as follows:

GENTLEMEN,—Your Committee on Resolutions beg leave to report that they find the following unfinished business from the last convention referred to this committee, namely:

1. Assistance to associations of architects to secure greater safety in the erection of buildings. By John S. Stevens, of Philadelphia.

2. Uniformity of measurements in brick and stone work. By Geo. Weaver, of Indianapolis.

3. Uniformity of constitution and by-laws for filial associations. By Geo. W. Roydhouse, of Philadelphia.

4. On the elimination of the word "master" in the naming of exchanges. By A. J. Campbell, of New York.

The present convention has also referred to your committee the following resolutions, namely:

1. A declaration of principles. By A. J. Campbell, of New York.

2. On mechanical trade schools. By Jno. E. Simms, of Washington.

3. On uniform size of brick. By D. V. Purington, of Chicago.

4. On general contractors. By G. W. Roydhouse, of Philadelphia.

Your committee report on the subjects referred to them from the last convention, as follows:

1. We recommend that the Executive Committee extend to all associations of architects a willingness to assist them in carrying out the objects mentioned.

2. We recommend that the Executive Committee be requested to obtain accurate information on the various ways or methods of measuring brick and stone work and prepare a plan of uniform measurements, and report to the next convention.

3. We refer this subject to the Executive Committee for consideration and formulation during the interim. The result to be transmitted to the various filial associations with request to conform as nearly as possible.

4. We do not consider it advisable to take any steps to secure the changing of the names of existing associations, but we recommend that new exchanges in selecting names should avoid the use of the word master.

We also report upon the resolutions offered at the present convention as follows:

1. That we have carefully examined and considered the resolutions offered by Mr. Campbell, of New York, and upon comparison with a declaration of principles adopted at that last convention, and we find them to be substantially identical, and as this is a most satisfactory testimony of the efficiency and thoroughness of the previous work, we recommend a reaffirmation of the principles adopted last year.

2. We are of the opinion that this resolution conflicts with the action already taken in the adoption of the report of the Legislative Committee, on apprenticeship, but we recommend that certain portions of the subject be referred to the Executive Committee for their serious consideration.

3. We report with a favorable recommendation.

4. We report with a favorable recommendation.

Respectfully submitted,

W. G. VINTON,

WM. FERGUSON,

STACY REEVES,

WM. P. JUNGCLAUS.

} Committee.

On motion, the report was adopted as read.

At the request of Mr. A. J. Campbell, of New York, the preamble and resolution presented by that gentleman, and reported upon by the Committee on Resolutions, was read without discussion.

Because of the expressed dissatisfaction of several members that the report on lien laws was passed without discussion, at the request of J. S.

*An amendment proposed by W. H. Sayward, but not put into regular form, was passed to the effect that special trade organizations shall appoint committees to act in conjunction with like committees from the master workmen, for the purpose of arbitrating all differences, and where such organizations do not exist this plan will follow.

Stevens, that action was reconsidered, and the matter left to the incoming Legislative Committee to report to the next convention.

The following Board of Directors were elected by the several delegations:

Geo. C. Prussing, Chicago, Ill.; D. J. Macarty, Washington, D. C.; Thos. E. Knauss, Columbus, Ohio; E. B. Crane, Worcester, Mass.; Henry Oliver, Charleston, S. C.; Marc Eidlitz, New York City; Wm. C. Jungclauss, Indianapolis, Ind.; John Rawlin, Grand Rapids, Mich.; Ashur Bassford, St. Paul, Minn.; H. E. Holtzinger, Cincinnati, Ohio; Alex. Chappoton, Detroit, Mich.; Rich. Smith, Milwaukee, Wis.; A. McAllister, Cleveland, Ohio; Benj. J. Whitcomb, Boston, Mass.; Wm. Harkness, Jr., Philadelphia, Pa.; A. H. Tilden, Buffalo, N. Y.; Jno. W. Briggs, Providence, R. I.; Geo. C. Elliott, East Saginaw, Mich.; E. L. Bartlett, Baltimore, Md.; Fred F. Beck, Sioux City, Iowa; Wm. Taylor, Kansas City, Mo.; Chas. W. Voshall, Rochester, N. Y.; Wm. Dickenson, Syracuse, N. Y.; Thos. Armstrong, Louisville, Ky.; David M. Alexander, Albany, N. Y.; H. N. Leighton, Minneapolis, Minn.; I. N. Phillips, Nashville, Tenn.; F. H. West, New Orleans, La.; Samuel Frances, Pittsburgh, Tenn.; C. A. Meeker, Troy, N. Y.

On motion of J. S. Stevens, the per capita assessment of \$2, as recommended by the Board of Directors, was made the assessment for the year.

On motion of Thomas Parker, of Boston, the convention unanimously passed a resolution, appointing a committee to procure and present badges, worth \$100 each, to George C. Prussing, chairman of the first convention, and to the retiring president, J. Milton Blair.

Thomas Parker, of Boston, A. J. Campbell, of New York, and George Tapper, of Chicago, were appointed as this committee.

A resolution was presented by J. G. McCarthy, thanking the members of the Cincinnati Builders' Exchange, their ladies, and the citizens generally, for the many courtesies extended.

On motion of George C. Prussing, of Chicago, a unanimous vote of thanks was passed to the representatives of the Cincinnati press, and the journals in other cities present during the convention.

The Chair: Gentlemen, we have with us a representative of the press of Chicago, and of a paper that has taken a lively interest in this Association from the first. I have the pleasure of introducing to you Mr. R. C. McLean, editor of THE INLAND ARCHITECT.

R. C. McLean: Gentlemen of the convention, as a representative of the press, I thank you for this honor. I shall not take more than three minutes of your time, for I know how anxious you are to go over to the hotel and see how beautiful the ladies look who are now enjoying their banquet there. The press is trying to help you in your good work all it can. On my part, what I have done has not been up to the measure of my desires. As the publisher of an architectural journal I have had more to do with architectural associations than those that affiliate with them. When this association of builders was formed I saw its opportunity for usefulness, as the lines between the architects and builders were becoming wider apart and more distinctly drawn, that is, in the direction of occupation. Once the architect and the builder were as a general rule one. Now the architect is one who designs and plans the building; the builder is the one who constructs it. Going thus hand in hand, each keeping within his special work, we have better buildings, for the architect is left to study his designs, and the builder to give his whole attention to carrying them out. Thus, gentlemen, whether you can get a uniform system of contracts does not seem to me of so much importance as through distinctive associations you can cultivate a spirit of coöperation and learn to work together for mutual ends. This is the hope I have in the future of your Association.

A vote of thanks was passed to the assistant secretaries; speeches were made by President-elect Stevens, Secretary Sayward, Treasurer-elect George Tapper, and others; and on motion of George C. Prussing, the convention adjourned. The next convention will be held at Philadelphia, the first Tuesday in February, 1889.

Convention Notes.

THE headquarters of the convention was at the Gibson House, and the proprietors did everything possible to make the stay of the visitors pleasant. Parlors were given for the use of delegation headquarters, and the expense of the convention hall was defrayed by them. The banquet was given in the main dining-room; that of the ladies in the "ordinary."

THE following from Chicago attended the convention: George C. Prussing, George Tapper, D. V. Purrington, J. G. McCarthy, Mr. and Mrs. Joseph Downey, Miss Ida Klein, William Goldie, Ferd. V. Gindele, Mr. and Mrs. P. B. Wight, Murdock Campbell, Mr. and Mrs. James John, M. Benner, Mr. and Mrs. Charles W. Gindele, Mr. and Mrs. W. H. Iliff, Mr. and Mrs. M. W. Powell, R. C. McLean.

A VISIT that was most interesting and instructive was paid to the School of Technology. The principal, Mr. George Carothers, was introduced by Mr. Allison. Mr. Carothers explained the workings of the school. It was a private school, and an experiment at first. It began with three boys two years ago and now has sixty pupils. The school had grown in numbers mainly by the efforts of the pupils. It was incorporated through the Order of Cincinnati and the Merchants' Club of Cincinnati. The course takes up, beside the regular high school studies, drawing and the use of tools. The tuition was \$60, \$75, \$100 and \$125, each year for the four years' course. Young ladies were entered the same as boys, and in the use of carving tools and planing the former showed themselves superior. Mr. Carothers is a graduate of the St. Louis School for Manual Training. Several young ladies were present and used the plane and saw to perfection, and while in the use of the latter tool the awkwardness naturally expected was not noticeable, it was probably the first time the visitors ever saw a carpenter lay his bangle on the bench before taking up the jackplane. The delegates pronounced the institution most beneficial, and indorsed the object it seeks to attain.

THE Chicago delegation and their ladies returned home in a special car on the Monon route, starting at eight o'clock Saturday morning. They were honored by the presence of Mr. and Mrs. W. H. Sayward, and Mr. and Mrs. Ronald A. Stewart, of Boston. One of the amusements indulged in was the making of rhymes on the names of each gentleman, some of which were quite bright. A symposium regarding the trip, being suggested, "Hiawatha" was murdered as follows:

On the railway, the great Monon,*
Journeyed guests from the convention,
Where the ages paleozoic,
Prehistoric times and ages,
Had been searched for facts and fancies
Regarding the great art of building.
Adam's love for decoration;
How old Noah swung the broadax;
How the Babylonian builders
Struck the job and traveled onward;
Struck because the plans and details
Were not drawn in ink on parchment.
After many days and evenings
Spent in work of weight and import,
Many members and their ladies
Journeyed homeward to Chicago.
Twenty-one the party numbered,
Twenty and one jolly people
(The historian not counted);
And as swift we journeyed homeward
Pleasant were the hours and minutes.
Eight the pleasant hour of starting,
Seven the hour when in the evening
Safely was the journey ended.
Adjectives must be imported
To describe this happy party.
Soon the car, dark and deserted,
Filled with radiance as there entered
All the ladies in procession;
And their lords, with many a bundle,
Followed, wearily submissive.
Oh the hours of rest and pleasure!
Oh the hours that passed like phantoms!
Restful, changing, hardly noticed;
Like the smile of our Joe Downey
When he signs a mammoth contract.
Bright the sun shone on the steeples
And the hills that wrap the city.
But the brightness was not perfect
Till the Saywards joined the party.
Then the mirth flowed as a streamlet
Loosed from winter snows and rigor,
Winter bound and snow enveloped,
Sings its pleasant song in springtime;
Then the fun spread through the carriage,
In the smoke-room grew most furious
Till the ladies sent friend Tapper,
Left with them as a protector,
Sent him with a weighty message
That their lords should return straightway.
Oh the lunch ordered by Gindele!
Oh the lunch that came in baskets!
Lunch that when each was uncovered
Showed a strange mixture of viands.
Pie was there that had been sat on;
Doughnuts that with age were hoary;
Age that made old time turn backward
To the days of the first Pharaohs
And the coffee in the teacups
Tasted like the breath of mummies.
'Twas so thin and wierd and ghostly.
Oh the sunshine in the meadows
And the "pastoral scenes" we passed through,
As the gentle game of poker
Flourished in the room for smoking,
Or our Sayward, the great singer,
Made apt hits on all the party.
As the train thus hurried northward
Bright the snow and ice was glistening,
Rivalling the eyes of ladies
Looking out on plain and forest.
Thus, in brief, was that great journey
From the city by the river
To Chicago by the lakeside;
From the river flowing grandly,
Like to fresh molasses candy,
To the lake that glistens ever,
And whose water always sparkles.
Long each scene will be remembered,
Long each incident be treasured,
And no other party, surely,
Of all those then home returning,
Saw so many happy moments,
So felicitous a journey.

* The Chicago delegates traveled over the Monon route and C. H. & D. line, the latter, running from Cincinnati to Indianapolis, being exceedingly picturesque, with probably the best roadbed in the state.

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FROM a late number of *La Semaine des Constructeurs* we gather particulars of the career of M. Charles Auguste Questel, architect, who died in Paris January 30th, 1888, at the advanced age of eighty years. In 1824, at the age of seventeen, young Questel entered the École Royale des Beaux Arts, Paris, where he was the pupil successively of Blouet, and of Duban. He was inducted into the practical details of construction as a pupil first in the Sarbonne, then in the Institute of France, the College of France, the School of Fine Arts, in charge of his eminent master, Duban, and later on the Offices of the Department of the Interior under Architect Moreau. He also spent three years in Italy as a traveling student. At the age of twenty-eight M. Questel won his first great success in a competition for the church of St. Paul, at Nimes, France. Ten years later he won the first prize again in the same city, for the construction of a monumental fountain. Three years afterward he was appointed member of the Commission for the Preservation of Historic Monuments, in which capacity he executed many restorations, including important churches at Lyons, Arles, and other places. He was also diocesan architect of Nimes, of Marseilles and of Ajaccio; architect of the palace of Versailles, and of the Trianon, which latter position he held for thirty years, and was appointed Inspector General of Public Buildings in 1862. From 1855 to 1872 he gave assiduous attention to the instruction of architectural pupils. His atelier was the *alma mater* of many able artists and constructors, including Pascal, who succeeds him as its chief. Among the notable works of M. Questel are the hospice at Gisors (Eure) 1857, the town hall at Grenoble in 1858, the insane asylum of St. Anne from 1862 to 1867, and the restoration of the gilded gallery of the Bank of France in 1876. With M. Riouel he was also architect of the museum and library of Grenoble, an interior view of which was published in the *American Architect* for June 9, 1877. In grandeur, simplicity, boldness and graceful proportion this interior is unsurpassed. In 1871 M. Questel was elected member of the Academy of Fine Arts, to succeed Duban, deceased. He bore the cross of the Legion of Honor, was an officer of public instruction, and from 1882 to 1886 he was President of the Société Centrale des Architectes, Paris. His pupils speak with affection of the uniform courtesy and affability of their wise instructor and friend.

GENERAL details of the falling of two roof trusses on the Midland Hotel, at Kansas City, have become so widely known through the daily press that we need not go further into the matter by way of description than the article, with diagram of the pier that first gave way, found on another page. No building accident during the last decade has occasioned such general comment, for, as a rare exception to the rule, it occurred upon a building being erected from the designs and under the supervision of one of the leading firms of architects in the United States, and whose greatest success lies in the erection of a large number of a similar class to that upon which the disaster occurred. But, while the verdict of the coroner's jury will show the general circumstances surrounding the cause and the effect, there are a few pertinent observations that can be made, developing as it does the attitude of the architect to his client, his legal or moral responsibility for the acts of his employés, and the responsibility of the employé or the contractor to the public as well as to him. The parties interested in a case of this kind are: first, the general public, and with them the relatives of the parties injured or killed; second, the owners of the building; third,

the architects and their employés; fourth, the contractors. The public at large, for its own protection, must ascertain whether there has been any criminal carelessness in the management of the work, and, if there has been, must determine by whom committed. It is further necessary to fix the financial responsibility, and to mete out the proper and just penalties. But in this investigation the representatives of the public should be absolutely impartial, and should fix the responsibility only after a most careful and thorough examination of the facts, and the strictures and penalties should be confined absolutely to the guilty parties. The duty of the owner of the building is to select architects of sufficiently high standing in the profession and in the community to give reasonable assurances that the contemplated building will be, during its erection and when completed, safe and sound in every respect. The duty of the architects to the public is to so conduct their office work in the preparation of drawings and specifications that these, when conscientiously executed, will produce an absolutely safe building. They must also, if they cannot personally act as superintendents of the building, select a person of experience, judgment, energy and honesty, to act as their representative in the supervision of the building. When they have done that, they have done all that their clients or the public can ask of them. They certainly cannot be held criminally, and we doubt whether they can be held financially liable, when it is clearly shown that the person deputed by them to act as superintendent was unquestionably qualified to discharge the duties of such position.

WITH reference to the liability of the superintendent, no matter how careful and how conscientious he may have been in a hundred cases, if he finally is remiss in one case, he is responsible to his employers, their clients and to the public for the consequences of his carelessness. His previous good conduct would, however, entitle him to the benefit of a doubt, when one exists. The contractors are also responsible to the architect and to the public for any failure to comply with the terms of their contract, as regards plans and specifications or the orders of superintendents. The use of material inferior in quantity or in quality to that called for by the terms of contract is in itself a criminal act, which, if committed, should fasten upon them the responsibility, financial and criminal, for all the consequences of such criminal act. Their financial and criminal responsibility is not lessened by failure on the part of a person employed by other parties as a superintendent to point out the error. In this case the drawings and specifications, if carried out, would have produced an absolutely safe structure. The superintendents were men who had been tried in similar positions and found competent; and the architects, as residents of Chicago, could not be expected to personally superintend their Kansas City work, and have therefore done their full duty. The architects, we are glad to observe, have acted in a most straightforward and manly manner throughout this trying ordeal, have sought to avoid no just responsibility, and are still enjoying the full confidence of the owners of this and other buildings under construction as before.

EITHER through the pressure brought to bear upon the committee in charge of the competition for a city hall and court house at Minneapolis by the architectural press, or through the good sense of the commissioners, Architect W. W. Boyington, of Chicago, was called in as an expert to aid in making a proper selection. As Mr. Boyington has had a broad experience in the construction of heavy buildings, and did not even know there was such a competition before he was summoned, he was enabled to make a perfectly

unbiased selection. In this competition, in which the final employment of an expert was the only saving feature, five premiums were awarded: \$1,500 being given to W. H. Dennis, of Minneapolis; \$1,000 to Mifflin E. Bell, of Chicago; \$600 to E. E. Myers, of Detroit; \$500 to Long & Kees, of Minneapolis, and \$400 to Alexander Murrie, of Minneapolis. These plans, by the terms of the competition, belong to the commissioners, and while they may select the architect to whom the highest premium is awarded, they can without violation of any agreement or point of honor hire any builder they choose to execute the work. If there is anything good about this kind of a competition, it is the fact that, no matter how badly a sanguine competitor may be "left," he can blame no one but himself, and pocket his loss with the best grace possible.

THE Grant Monument Association of New York has issued a circular letter, accompanied by a topographical map, addressed to the artists, architects and sculptors of the United States, inviting them to present competitive designs for a monument or memorial building, based upon an estimated expenditure of \$500,000. The competition is to close November 1, 1888, the best five designs to be selected and awarded premiums, ranging from \$1,500 to \$200. Though the drawings are to be submitted under a *nom de plume*, the general plan of the competition, as outlined by the circular letter, is such that no architect of any professional standing can become a competitor. As the architectural associations, east and west, are entering protests against the plan adopted, and as the members of the association seem desirous of securing the best possible design and willing to be instructed in the method, it is possible that this may yet prove an honorable and successful competition. We would suggest, however, that the monument association decide on either a monument, or a memorial building, as a similar competition, lately closed, showed that while a monument was from the first the preference of the committee, and finally chosen, the competitors were not informed of the fact, and many of the best architects designed memorial buildings, and in this way were practically thrown out of the competition from the start. It would be better to decide on one form or the other than oblige competitors to make a design of each in order to stand a chance of success.

WHILE architecture as an art is practically coeval with civilization, architecture as a profession has been slow in taking its place with the other learned and artistic callings. Its greatest historic triumphs have been the work of men eminent as painters, sculptors, modelers, etc., as Michael Angelo, Bernini, and Blondel, rather than as architects. The Louvre was designed by Perrault, who was a physician. Even Sir Christopher Wren began his career as a man of affairs and of scientific research rather than as an architect. Architectural associations are likewise of a comparatively modern development, both at home and abroad. One of the oldest organizations of the kind in the world is the Société Académique d'Architecture, of Lyons, France, which was founded in 1830, less than sixty years ago. The Paris Société Centrale des Architectes, dates only from 1840. The comparatively venerable Royal Institute of British Architects takes us back only to the year 1834. The American Institute of Architects was incorporated in 1857, but held its first convention ten years later. The Western Association of Architects, which has now eighteen state associations affiliated with it, was organized as recently as 1884. The Belgian Société Centrale d'Architecture was formed in 1872, and the Italian Society of Engineers and Architects took its present shape in December, 1885.

Photography in Architecture.*

PART V.—BY FRED D. FOSS.

THE exposure of a plate on a subject has no visible effect on the negative, but there is a chemical action formed whereby the effect is rendered visible by the subsequent application of a liquid called a developer. There are numerous formulas for developers, each and every dry plate manufacturer publishing a formula which is best adapted to his plates, and it would be very hard, if not impossible, to find a developer that would work equally well with all brands of plates. Upon the first introduction of dry plates but one standard developer was used, that of oxalate of potash and sulphate of iron, and for many purposes or classes of negatives, this developer has never been equaled by any of the later formulas of potash, soda and pyrogallic acid. While there is a greater latitude allowed to exposure by using the commonly called pyro developer, the oxalate and iron developer can be made to give very fine results by using a few drops of a weak solution of hyposulphite of soda, say 1 to 5,000, as an accelerator, or a few drops of a 1 to 10 solution of bromide of potassium as a restrainer. The use of the above and the method of compounding them will be given later on. It is proposed to give the formula for compounding the oxalate and iron developer, commonly known as the ferrous-oxalate, as it is one of the cleanest, if not the very cleanest, developers known. While the ferrous-oxalate developer will not allow the beginner the latitude of exposure (as before remarked) he may desire, yet, with a little practice it will yield very fine results. It is proposed in these articles to give the formulas of all the best developers known to date, and to explain their various characteristics. The oxalic being the older, preference will be given to it. Make a saturated solution of *neutral* oxalate of potash and one of sulphate of iron. A saturated solution of any salt is obtained when more of the soluble salt is placed in the water than will dissolve, in which case the excess will remain lying undissolved on the bottom of the vessel. If the water be warmed, say to 80 degrees Fahr., a saturated solution can be more readily and surely obtained. The solubility of neutral oxalate of potash is 1 to 3 (one part potash to three parts of water at 59 degrees Fahr.) so any quantity can be made by observing the proportion. The solubility of sulphate of iron (ferrous) is 1 to 1.3 (one part of iron to one and three-tenths parts of water at 59 degrees Fahr.) and the same rule as to quantity applies to the iron solution. The solution of oxalate should be decidedly acid, and, as it is made from a neutral salt, it must be rendered acid by the addition of citric acid. A good formula for the developer is the following:

- No. 1.
Neutral oxalate of potash..... 1 pound.
Water (at 75 degrees Fahr.) 5 pints.
Citric acid..... 60 grains.

Test with blue litmus paper, which should turn a decided red; should it not do so, add citric acid slowly until it does.
- No. 2.
Sulphate of iron..... 1 pound.
Water (75 degrees Fahr.)..... 2 quarts.
Sulphuric acid (C. P.)..... 60 drops.
- No. 3.
Bromide ammonium..... 30 grains.
Water..... 1 ounce.

Both salts should be thoroughly dissolved, allowed to settle, then decant and filter. To develop, take of No. 1, 3 ounces; of No. 2, 1 ounce. It has already been said that the defects of exposure may be remedied by the treatment of the plate in development. I do not mean to say that a very great under-exposure or over-exposure can be remedied, but a moderate defect one way or the other may be. In giving the formula for the developer we measure out three ounces of the No. 1, or oxalate solution, one ounce of the No. 2, or iron solution, adding but two drams of the iron to the oxalate, and five to ten drops of the No. 3, or bromide solution. It is the province of the oxalate solution to combine with the iron of the iron solution, forming the ferrous-oxalate, which is the active developing material; and it is the province of the bromide solution to restrain the action of the ferrous-oxalate upon the sensitive surface of the plate. The formula for mixing the developer previously given is that which has been found best adapted for a properly exposed plate, but a much under-exposed plate could not be developed with the quantity of iron solution used in that instance, so two drams more of the iron solution is added to bring out the image, and it may be necessary to add the entire ounce first measured out in order to start the development, but do not add more than the ounce of the iron solution; instead, add three drops of a solution of

- Hyposulphite of soda..... 1 grain.
Water..... 1 ounce.

In case the plate, after using this full strength of the developer, still lacks its proper character, it will be no use to add any more of the iron solution, as it is now saturated, and the addition of even one-half dram more of it will cause a decomposition of the developer, a precipitate of a yellowish color being produced, which sticks to the surface of the plate like sand, and the solution will at once cease to act as a developer. It will, in fact, begin to react, and will soon redissolve the image which has already been developed. This fact shows the importance of using the oxalate solution absolutely saturated, because, in case of the necessity at any time of using a large proportion of the iron solution, the iron might be added in excess before the original ounce poured out was entirely used, and thus the developer be spoiled. Caution: *Always add the iron to the oxalate, never add the oxalate to the iron.* Having found the first plate under-exposed, and you have others to develop which may be troubled with the same complaint, proceed differently. It has been said that the bromide solution is a restrainer of the action of the oxalate and iron, and, as there was some of the bromide solution used in that developer, try the next plate without any bromide solution at all, merely using the oxalate solution and two drams of iron. If the development proceeds gradually, as it should, all is well; but if, upon the addition of more of the iron, as may become necessary, the picture seems to develop and become black too quickly, pour off the developer into the graduate, add a few drops of the bromide solution, which will restrain the action of the developer, return the developer to the plate and continue development until finished. Negatives developed with ferrous-oxalate should be carried until the image shows plainly on the back of the plate, and the front or film side appears sunken in or covered with a veil.

(To be continued.)

Foundations of the Auditorium Building, Chicago.*

BY DANKMAR ADLER, ARCHITECT.

THE design of the foundations of the Auditorium building now being erected in Chicago by Architects Adler & Sullivan, involved the solution of several perplexing problems, and, as is usual in such cases, this solution implied the adoption of a series of compromises between conflicting positive wants and imperative conditions. The most salient and prominent want appeared to be a pit under the stage, 62 by 120 feet in extent, and sunk to as low a level as possible. Every additional foot of depth gained for this pit promised greater possibilities of improvement in stage mechanism, and threatened increased difficulties and complications of construction. Among the many limitations to the accomplishment of all that seemed desirable in this connection, there appeared considerations as to the safety of adjacent buildings, and the close proximity to the stage walls of the foundations of other parts of this building; and there was underlying all the proposed constructions a compressible and slippery soil, and overlying the floor of the stage pit, the water level of Lake Michigan, only from twelve to fifteen feet below the street grade. Again, a boiler and machinery plant of nearly 2,000 horse-power, incidental to the lighting, heating, cooling, ventilating, elevator, kitchen and laundry apparatus of the building required for its suitable accommodation an area equal to fully two-thirds that of the entire building, and to make the basement story available for this purpose, a story height of from ten to fourteen feet was indispensable. In view of the commercial reasons for keeping the first floor as near as possible to the ground, it became necessary to sink the basement floor, and therefore the foundations, to a considerable depth below grade, and to adopt a practice different from that so successfully followed in the construction of the tall buildings of the board of trade district, the foundations of which average but thirteen feet below street grade.†

Another limitation to absolute freedom of action was the existence on the north line of the proposed building of two party-walls, that of the Giles building, 160 feet long, and extending to a depth of about twelve feet below grade, and that of the Studebaker building, 170 feet long and extending to a depth of nearly 17 feet below grade. As, for the reasons before stated, it was absolutely impossible to confine the foundations within the limits of depth of those of the first-mentioned party-wall, their entire reconstruction was determined upon.

Diagram No. 1 shows the old and the new foundations of this wall, and is an interesting exhibit of the characteristics of the buildings of the old and new Chicago; it also shows the methods adopted for holding the wall. As the entire or even a partial reconstruction of the foundations of the party-wall of the Studebaker building was inexpedient, seventeen feet,

*For diagrams see double page illustration, also three photographs of foundations from a series taken for THE INLAND ARCHITECT during the progress of the work.
†The reader will infer from this that the floor of the stage pit and parts of the boiler and machinery space are below the surface of Lake Michigan, and that the greater part of the basement floor is below sewer level. A description of the methods adopted for draining the latter and for protecting the former against seepage will be given in another article to be published in the future.

*Continued from Vol. XI, No. 1, page 3.

the depth below grade of its foundations, was adopted as the standard depth for foundations of the Auditorium building. The exceptions made were first, the walls surrounding the stage, which were sunk to a depth of twenty feet below grade, that being the limit of safety of variation of level for contiguous foundations in soil of the character developed by the preliminary borings and pressure tests. The next exception was the tower, the foundations of which are carried down to a depth of eighteen feet, with a view to keeping the projections of the individual offsets within the limits of safety without the sacrifice of the basement story. Finally, a number of minor foundations were carried down but twelve to fifteen feet below grade. The method of bonding together contiguous foundations started at different levels is indicated on Figs. 2, 2a and 2b.

The spread from the faces of the basement walls and piers to the extreme limits of the foundations being very great, the requisite transverse strength of the individual layers was secured by the use as the base of the entire structure of two layers of twelve inch timbers, covered by a bed of concrete, inclosing seventy pound steel rails, twelve inch steel I beams, and fifteen inch steel I beams, as occasion demanded in the different cases.

In determining the timber areas and metal weights required to resist these transverse strains, the projecting parts were calculated, in each case, as cantilevers of length equal to their projection with an equally distributed load, as determined in each case from the calculated weights of the superstructure. The fibre strain allotted to the timber, both for compression and tension, was twelve hundred pounds per square inch, and for the steel twelve thousand pounds per square inch.

Quite interesting were the foundations of three pillars adjoining the Studebaker Building, the load of which it was intended to carry independently of the foundation of that building. Fig. 3 illustrates the expedients here used. Great care was taken to leave a clear space of four inches between the twenty inch cantilever beams and the offset of the Studebaker foundations. In another case where it was found necessary to relieve the Studebaker foundations of the weight of parts of this building, this was accomplished by the process illustrated by Figs. 4 and 4a.

Another interesting piece of construction is illustrated by Figs. 5 and 5a, which shows the treatment of the foundations of a number of small columns carrying weights scarcely more than nominal. As it was impossible to make foundations small enough for these, to insure settlements equal to that of their more heavily loaded mates, they were set upon screws, so that as the more heavily loaded portions of the foundations took their settlement, the lighter weights could be made to follow by a proper turning of the screws.

The tower foundation is a solid mass of material 100 feet long, 67½ feet wide, and 7 feet thick, composed of timbers, steel rails, twelve inch and fifteen inch steel I beams, crossing each other in such manner as to distribute the weight of the tower which exceeds thirteen thousand tons, over the entire surface of the foundation.

The method of laying the foundations may be briefly described as follows: The lower course of timbers was bedded in sand, the second course was bedded in cement. The timbers were laid with rather open vertical cross joints, and wherever practicable a filling of broken stone, brick or of sand was worked in between the edges of the timbers and the trenches. All of this was done to insure a certainty that the water of the lake (the surface of which varies from the level of the tops of the timbers to a height of three feet above the same) would completely surround all the timbers. The various individual foundations are also united with each other by small trenches filled with building debris or sand. This is done to permit the artificial flooding of the trenches should the level of the lake ever sink to a much lower level than the lowest stage of water yet recorded.

The foundation above the timbers for all walls is a layer of concrete in which railroad bars running lengthwise of the walls are imbedded. From the top of this concrete to the first story floor joists, the walls are built of rubble masonry laid in cement. The pier foundations have a bed of concrete in which from one to three layers of railroad bars are imbedded, forming offsets of such dimensions as to keep the fibre strains of the metal within the limit before stated. In the case of the foundations of two of the smoke stacks, this limitation of fibre strains made it necessary to introduce a layer of twelve inch steel beams, as shown on diagram, Figs. 2a and 2b, while in the tower foundation the offsets were so great as to require a mass of concrete five feet high, enclosing three layers of rails and two layers of fifteen inch steel beams, distributed as shown on diagrams Figs. 6 to 9. From the top of the concrete to the first story floor, the tower foundations are formed of block rubble masonry, with binders of planed dimension stone.

For all concrete and for all stone masonry below the basement floor level, American Portland cement was used. For the masonry above that line, about one-third of Louisville and two-thirds of Utica cement were used. The concrete was mixed in the proportion of two parts coarse-broken stones, three parts fine ditto, two parts coarse sand, one part fine

ditto, to one part cement. About one-half of this was mixed by hand, dry, and then tempered with water. The remainder was mixed by machines. It was put in in layers from four to six inches thick, and each layer was well rammed. No difference in quality was observed as between the hand-made and the machine-made concrete, and the use of the latter was found advantageous only when very large masses of concrete were wanted in close proximity to the bank on which the mixing machine was set.

The volume of earth excavated was 28,860 cubic yards. The quantities of materials used were as follows: One million feet timber, 231¼ tons steel rails, 76¾ tons steel I beams, 2,565 cubic yards broken stone, 2,921 cubic yards sand, 2,650 barrels cement, 933 cords rubble stone, 4,296 cubic feet dimension stone, and 1,280 thousand brick.

The borings and tests made to determine the character of the soil underlying these foundations were unusually thorough. They were made by Gen. William Sooy Smith, well known through his valuable services in connection with some of the most noted engineering structures throughout the country. Borings were made at an average distance of twenty feet apart over the area occupied by the building. Diagram of these is given on Figs. 10 and 11.

Tests as to the bearing capacity of the soil were made under quite a number of varying conditions; first, they were made with bearing disks of various areas so as to determine the difference, if any, of bearing capacity of the larger or smaller areas, with a view of establishing the extent to which the shearing of the edges of the foundation is an element to be considered in their calculation. Next, these test disks were set at varying levels so as to determine the relative bearing capacity of the soil at these different levels.

Our Illustrations.

Residence for J. L. Woodward, Chicago; W. W. Clay, architect.

Block of residences for Joseph Beifeld, Chicago; L. B. Dixon, architect.

Residence for J. L. Cochrane, Esq., Edgewater, Ill.; J. L. Silsbee, Chicago, architect.

Barn for Mr. Clem Studebaker, South Bend, Ind.; Cobb & Frost, Chicago, architects.

Amusement Hall and Pavilion, Lake Minnetonka, Minn.; L. S. Buffington, Minneapolis, architect.

Diagrams showing expedients used in the foundation construction of the Auditorium building, Chicago; Adler & Sullivan, architects.

Competition sketches for city house front, by the Buffalo Architectural Sketch Club, February 13, 1888. The criticisms of the adjudicating committee were as follows:

"Ass's Head," F. R. Fuller. The effort which takes the prize in this competition, shows very fair but mixed treatment of Medieval, Italian and Romanesque. Italian in Loggia and Romanesque treatment of entrance, the design strongly suggesting the entrance to the Hotel Lallemand in Bruges. The whole composition is very pleasing and satisfactory, and the rendering excellent. "Crow," J. A. Johnson, is a design of considerable merit. Main room, first story, has rather meager light, and the brackets are bad. There are no indications of down spouts, and if water was taken care of, inside conductors would still leave snow and ice to slide on to neighboring property or into the street. "You know," M. G. Beierl, is somewhat Italian in style, and but for the small windows in the second story would rank first. It is good in all other ways, especially in rendering. "Pants," W. L. Fuchs, is rather nondescript in ornament, having Francis I style, Elizabethan and Romanesque for ornamentation in frame of second story window. The height of the second story is shown to be fifteen or sixteen feet. A bad idea to return down spouts back into the building.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence of B. H. Warder, Washington, D. C.; H. H. Richardson, architect.

Entrance to residence of B. H. Warder, Washington, D. C.; H. H. Richardson, architect.

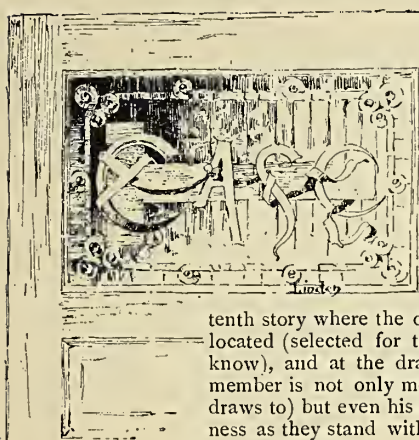
Residences on 16th street, Washington, D. C.; H. L. Page, architect. Principal floor plans in margin.

Residence for C. T. Yerkes, Chicago; Burling & Whitehouse, architects. Principal floor plan in margin.

Two plates showing foundation construction Auditorium building, Chicago; Adler & Sullivan, architects.

A NEW and revised edition of a celebrated "cook book" has been issued by the Chicago, Rock Island & Pacific Railway. It contains a choice selection of valuable recipes, with much other useful information pertaining to the culinary art, including many formulas contributed by noted cooks and caterers. It is an elegant volume of 126 pages in illustrated cover, one department (105 pages) being devoted to the cooking of meats, fish, game, oysters, entrees, vegetables, baking, frying, roasting, etc., another to medical prescriptions and a chapter to laundry work. Housekeepers are delighted with it, and find it indispensable for frequent household reference. Copies sent at 10 cents each (for postage) to any applicant. Address E. A. HOLBROOK, General Ticket and Passenger Agent, Chicago.

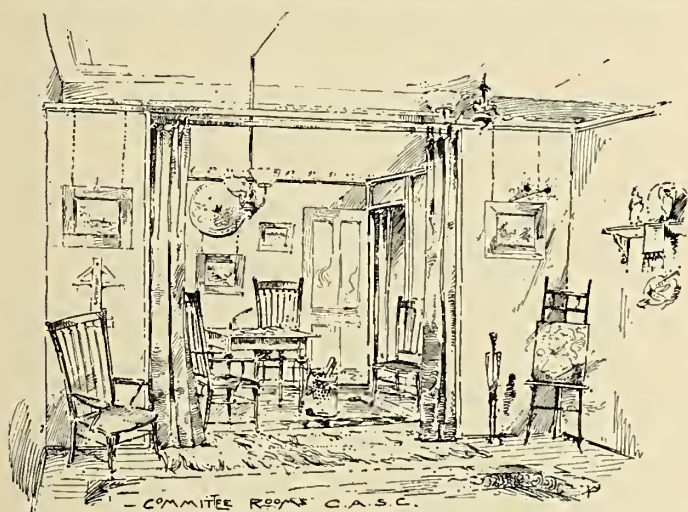
The Chicago Architectural Sketch Club.



IS the legend that meets the eye, beautifully executed in stained glass, at the entrance to the new quarters of the Chicago Architectural Sketch Club in the Art Institute. Since the club moved into these elegant apartments an air of proprietorship hangs about the ulsters of the draftsmen on the street; they no longer chaff the elevator boy as they ascend to the tenth story where the offices of their employers are located (selected for the excellent north light, you know), and at the drafting board the C. A. S. C. member is not only monarch of all he surveys (or draws to) but even his dividers put on an air of stiffness as they stand with their legs apart and make pointed remarks.

On entering the club rooms in the Art Institute on opening night, the first thing of beauty noticeable was a stained glass panel in the door, bearing the front initials of the club; the next thing of beauty was Schmidt, telling a group of admirers of his last bicycle ride to Aurora.

What a rare chance to describe the more notable members of the club—notable, of course, through the illustrations from their drawings that have appeared from time to time in THE INLAND ARCHITECT. If this be a criterion, W. G. Williamson, secretary of the club, should be first spoken of. With his clear cut, energetic face and high forehead, he shows the indefatigable worker he is, and to him, perhaps, more than to any other member, does the club owe its past success and present prosperity. He seldom misses a club meeting or fails to present a drawing in a competi-



tion. There is George Beaumont, the president, now a practicing architect,—a hard practical Saxon face, North of England accent when he speaks, and an experience gained by close study and practical work on two continents.

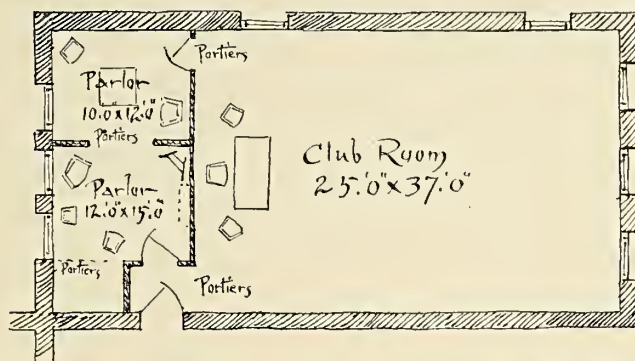
Fraenkel is there, and Schmidt, his chum, the former tall and slim, but otherwise never like the captain's spare topmast, left at home, for he is always at the club meetings. The latter is a blonde, with brown eyes, smooth face, and the figure of an athlete; devoted to the pencil, the water-color brush, his bicycle and pretzels. Over yonder is William Bryce Mundle, he who took the second prize in the architectural league competition, and whose handling of the pencil, as well as designing talent, has made him known to every draftsman in the country.

He comes from Hamilton, Canada, and if he should ever go back to that picturesque old town, where the highest art they know is to use white stone lintels and caps, in connection with red brick set in white mortar, he would revolutionize the architecture of the past century that has been merged without change into the present.

Linden is fair, slight built and unassuming, but if a comparison can be made,

the best artist in pencil and water-color in the club. He and his partner, Wagner, treasurer of the club (a dark-complexioned, business-like young man), are artists in decoration and stained glass, and the decoration of the walls, as well as the stained glass panel in the door, are not only their work but their donation to the club. At this date they are the envy of the club members, as they are enjoying a sketching tour in the South and Cuba.

O. C. Christian. See him now, and he looks like a good-natured clerical Christian, but see him at the drafting board, and he shows himself skillful and accurate. He can execute geometrical drawings as well as freehand sketches.



Where there is a Christian there should be a Church, and there he stands talking to O. C. Smith and Charley Kassell. He has not spent all his time in designing churches, but is one of the most thorough students in the club. His sketch of the Monte Cristo will be remembered as a delightful piece of penwork. Smith comes from Cincinnati, and is an old friend of H. P. Kerby, and pretty near as good a draftsman, too. Kassell is an ex-treasurer of the club, which accounts for the affable bank president look observable when he puts on his glasses, a look also seen at times in the face of another ex-treasurer, C. W. Trowbridge. The latter made a good treasurer, too, though he did give a large portion of his time to steel beams. He has had more to do with columns than the editor member

(another ex-treasurer), and his conversation is always somewhat ironical. That young man with the fresh, ruddy complexion is Jobson. He represents the Scotch element in the club since Harry Lawrie went west to build up the country, and he is a credit to his profession both at home and abroad.

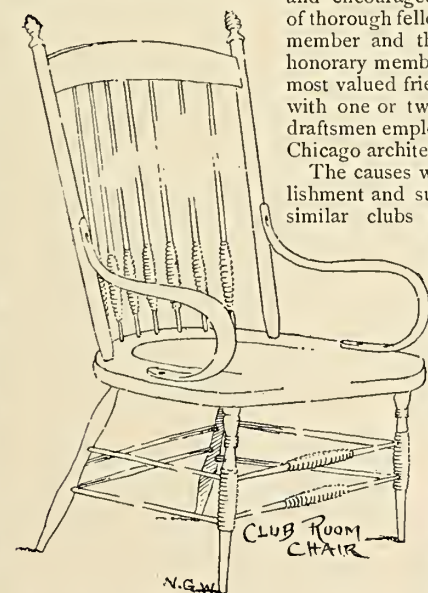
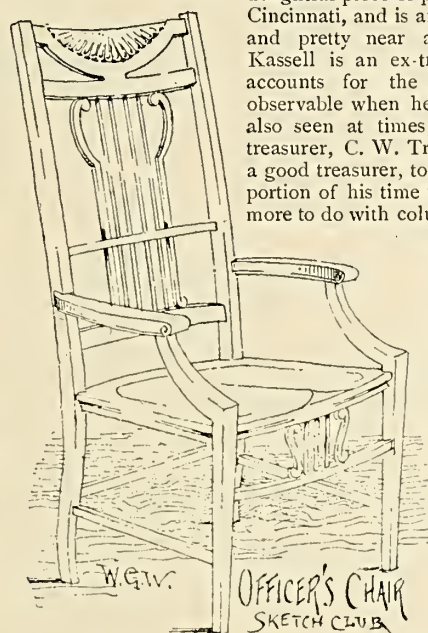
But to describe the notable members would be to describe them all, for each has to a greater or lesser extent become known through their drawings in the architectural publications, and each has much

architectural honor in store for him in the future. The event of the evening is a paper by Architect John W. Root, and, for the time being, he, the greatest architectural genius in the West, if not in the country, is a draftsman among draftsmen. After his paper is read and discussion invited, how he seems to enjoy the bright questions, practical ideas, and ingenious theories that are so freely expressed by the members, drawn out, and encouraged as they are by the feeling

of thorough fellowship existing between every member and their guest. Mr. Root is an honorary member of the club, and one of its most valued friends. The club is composed, with one or two exceptions, of architectural draftsmen employed daily in the offices of the Chicago architects.

The causes which have lead to the establishment and success of this as well as other similar clubs in the United States, are peculiar. Sketching, as applied in the profession of architecture, has never been considered so important a part of a draftsman's training as at present. In England geometrical drawing is more largely practiced where the work goes beyond preparation of working plans, but in America, the accurate geometrical drawing to scale has given place to freehand sketches, which, though still retaining the accuracy of scale, have the more pleasing effect obtained in the freehand etching or water-color

perspective sketch. While to some, and more particularly those educated in European schools, it may seem that the exercise of a talent for freehand work may tend to make the draftsman simply a picture maker, it must be understood that he loses nothing in accuracy, but gains in the exercise of his artistic talent in the use of his pencil and ability to design. Quite early



in the nation's architectural history came a demand for architectural schools, and departments of architecture were established in connection with several leading colleges, and these without exception have become notable; but either because they are not adequate, or the average draftsman cannot afford the time or expense involved, but must work by day and study by night, if he would rise in his profession, his alternative being an abandonment of his profession and the adoption of some mercantile pursuit as a means of livelihood, the draftsmen are seeking among themselves to institute clubs like this for their mutual improvement.

The Chicago Architectural Sketch Club was organized in 1885, through a call issued by THE INLAND ARCHITECT. The first meeting was held at the offices of that journal, the project being suggested and placed before the draftsmen by J. H. Carpenter, who was the first president of the club.

The Builders and Traders' Exchange immediately offered the club the free use of its assembly hall, and to this generosity the club owes much of its success, and now that a permanent home for the club has been secured this disinterested friendship of the builders of Chicago is not forgotten.

The new quarters in the Art Institute, of which floor plan and sketches of decorations and furniture are given, were opened January 16 last. While the study of architecture is the main object, and the papers read and the club competitions all have some bearing on that profession, the club is essentially a sketch club, and the rules of membership admit anyone who can submit a sketch showing artistic skill, the club exhibits showing bits of landscape, bridges and ruins, quite as frequently as stately piles of brick or stone.

The club rooms are open to members at all times, and in the summer months the sketching trips of the club are most popular and enjoyable, so that until the time comes when Chicago has an architectural school properly organized, the sketch club will fill its niche and fill it well. It is, however, essentially a club for recreation, and the disposition of its members is rather to avoid the practical work of the day and devote the club evenings to the art side of their profession.

The Minneapolis Court House and City Hall Competition.*

TO what cause must I attribute the scarcity of Chicagoan competitors for our court house and city hall? Their own good sense, your esteemed editorial in December, or to the much circulated report that "none others" than Minneapolitans "need apply"? Your esteemed editorial did it. Why of course it did! And Messrs. Edbrooke & Burnham were too busy to read it; and Mr. M. E. Bell has returned but so very lately among you that he can almost be called a Washingtonian yet. Whatever excuses you may make for these two firms, they alone represent you in this competition.

Philadelphia has one representative, C. F. Collom; San Francisco one also, J. Gash; McDonald Bros. show what Louisville, Kentucky, can do; and Colonel E. E. Myers, with his "thirty-five years' experience, and those, gentlemen, spent entirely upon the execution of just such important work," comes here from Detroit, via Texas. R. T. Brooks is another Detroitier, and there is one design from Pittsburgh by Mr. L. O. Danse. St. Paul sends in four victims, Minneapolis, ten; the world at large, three, making a grand total of twenty-three designs submitted.

Out of the twenty-three represented there, not one of the architects, as we may well suppose, had a glimpse of the other fellow's design, until the public did, so there is no probability of his knowing what style or shape or form the others' efforts would be in. Then again, not more than three (if that many) out of the twenty-five ever studied together, or in anything like the same school; yet fully two-thirds of the aforesaid efforts were to follow in the steps of the great Richardson. Some, naturally, rather toddled after than followed him. Others, notably Messrs. Long & Kees and Mr. Dennis (both of Minneapolis), have not only well followed his style, but actually come out with almost fac-similes of his Pittsburgh Court House: massive triple-arched entrance, a bold and handsome tower rising directly over it—everything, in fact, to lead one to believe that if not a cold copy from the Pittsburgh Court House, the latter was surely a strong, very strong *motif* for their designs.

Well, two-thirds were Richardsonian, and all of these, of course, had tall, square towers growing out of the center of the building, or in the middle of one of the façades, or upon a corner, and several of the others adopted the square tower feature (without being Romanesque), so that there were really but three, which, twenty years ago, would have looked at all like a government building. Yes, the dome is fast becoming a relic of the past, and twenty years hence, they will be reviving them again, and our sons will be designing "Renaissance Washington Capitol" domes upon every blessed new court house in the land, i.e., if they need courts then.

The plans are all safely hidden away for the private inspection of the honorable commissioners; only the exteriors are left for the vulgar gaze of the rabble, so that you have to guess at the arrangement of the buildings from what you can gather from perspectives. The great majority have planned for an open court in the center, and there are a few in the form of the letter H.

The location and space afforded a good opportunity for a striking design; a full block, 330 feet square, and well up above grade. Most of the designs are for buildings about 250 feet square or so, while some few cover up to the sidewalk; these latter are apt to be left out in the cold, as the commissioners lay great stress upon the fact that they will not consider any plan that cannot be built for the appropriation—\$1,150,000, and have called for the exact cubical contents of each plan.

Now, then, such a building thoroughly fireproofed cannot be touched for less than 28 cents per cubic foot, and the commissioners know it as well as the architects do; so where will the latter be, who have much over 4,000,000 feet in their buildings—and they are legion.

I will describe ten of these designs in particular, they are the best; the others begin with mediocre, and dwindle down by rapid strides, to the absolutely abominable.

Of the ten, the first I saw was by Mr. Farwell, of St. Paul, a young and promising student. It is a well studied design; Romanesque in feeling and with a bold touch here and there of elaborate ornamentation. A rather heavy tower in the middle, and a too monotonous arrangement of the windows as its worst faults. It differs widely from the average student's work in not being an ideal; everything seems practically and economically studied out.

No. 2 was by Yost Brothers, Minneapolis, and Columbus, Ohio. It is "Romanesque." A very tall and heavy tower surmounts the main entrance. The building has an inner court, covered over at the second story and forming a grand rotunda, which they have shown by a very clever interior view. This one looks somewhat like the Pittsburgh Court House and is very colossal in all its details. Some of the courses of stone below the water-table are represented as fully six feet thick (they are about four and one-half), but perhaps that is a defect in the drawing.

A pleasant surprise awaited me in the next room: three designs, side by side, and facing the door and all *different*. Nos. 3 and 4 are the work of Messrs. Handy & Cady, of Minneapolis; one a splendid specimen of Florentine 15th century architecture; a perfectly square, plain building, with a high but slender square tower. The flat, tiled roof, bold and far-projecting cornice, darkly shaded loggia under the roof, well accentuated, almost Venetian windows, all, in fact, to carry me back to sunny Italy. A splendid design, but, I have to confess, hardly suitable for a court house in this country. Minus the tower, it would make a grand college or museum building, and hardly that, for I would hate to see it other than a fine *plaza* in its own native Florence.

The other was a good, modernized, and somewhat westernized, Flemish design. Modest yet fairly imposing. A good substantial tower over the main entrance; a first-class roof-line; good dormers, and a design that I am confident could be built for the money and yet not look cheap. I almost gave it first place in my mind, all conditions considered.

No. 5 is by Messrs. Orff Bros., local men too. It is a French design (of about the François premier period), with a large square tower over the main driveway into the court; roof-line good, detail bold; massing, fair. The greatest fault I could find with it was the absence of imposing entrances; they were *evident* enough, but I think that to such a building, they should be a *little* grand. The detail, like in the two preceding designs, is the pure thing of its particular style (an unusual occurrence). This and the water-color perspective are pronounced even by competitors one of the best executed and presented designs in the competition.

No. 6, by Messrs. Edbrooke & Burnham, Chicago, is a good, substantial building, severely plain, and of what I might call an Egypto-American style, for the only distinctive ornaments about the building are some very Egyptian capitals on the main piers of the front. The form is an H with a good tower, rising out of the connecting bar. It is, to my taste at least, the best design submitted by any of the *outside* competitors.

No. 7 is the work of Mr. Alexander Murrie of Minneapolis. A good building, well rendered in the regulation English pattern. Classic, i.e., the English Renaissance of that style; portico, dome, rusticated basement, everything just like the Glasgow municipal buildings and a hundred others.

No. 8, by Messrs. Appleyard & Dorr, Minneapolis; a plain, almost too severe rendition of the Romanesque. Some parts really very good.

No. 9, Messrs. Long & Kees, Minneapolis, is a double design; one in the old demi-semi-Classic style (called by one of your northwestern contemporaries Neo-Greek (?), with a dome, columned portico, and that we used to delight in before the birth of the—must I repeat it—Romanesque craze. The other, a better building, but it is in the above mentioned style, and very much like the Pittsburgh Court House. It is not a good copy, however, as there are too many unhappy little bays, jerks and breaks—some-what choppy, in fact.

Finally, my No. 10 is Mr. Dennis' design. It is a splendid building and worthy of the great master himself; really, when I first looked at it I thought it *was* his Pittsburgh Court House, and to one not familiar with the master's work, the disciple's seems almost perfection. But to me it was discouraging, for even at the risk of bungling, I do like a wee bit of originality; whereas, in this one, the tower, the entrances, roof-line, aye, even the smallest detail, seem to have been most painfully *copied*.

Mr. M. E. Bell, of Chicago, has a very good design, with something more of novelty about it than his stock United States buildings. Mr. (Col.) Myers of Detroit, a large, ponderous structure with a corner tower; of no particular style or school. I heard a wag call it the bamboo-fishing-rod style; his stepped-in turrets, with their huge string courses, do, I confess, put one in mind of such things, and yet it has excited much favorable comment, but then, you know what the *vox populi* amounts to in matters of art.

From these two the scale rapidly decreases; perhaps I had better not name them in order, for I do wish to live a few years longer, so I will simply state that the other Minneapolis competitors were Messrs. Kimball & Co., Messrs. Haley & Son, and F. E. Hoover. From St. Paul came Omeyer & Thori; C. B. Seaton, and a Mr. Maltby. Then from at large "L'Etoile du Nord" and a "Star" and Messrs. I. Hodgson & Son, who are in Minneapolis, Omaha and Kansas City.

The drawings are worthy of much study; the great majority are good; some beautiful, and then, necessarily, some poor ones. But when I see such drawings as Mr. C. F. Collom's, of San Francisco, and Mr. Maltby's of St. Paul, I grow blue all over to think that even a court house commission should be insulted by our profession.

The A No. 1 drawings are the Messrs. Long & Kees' two designs. One a water-color by Mr. J. K. Wilson; a perfect rendering of the old school, every line and cloud just so; gum arabic glazing all complete; the other a clean and well-defined pen-and-ink by D. A. Gregg. Mr. Dennis has three elegant drawings, all by M. J. Anderson; one a most beautiful sepia pen-and-ink on cream tinted paper, and two water-colors. These are a little tropical for my taste; too much sun and flower—still, very fine.

*Special correspondence of THE INLAND ARCHITECT AND NEWS RECORD.

The Orff Bros., have a water-color by F. W. Fitzpatrick, who I see is permanently associated with them, a winter scene very good, but the colors a little muddy.

The two designs of Messrs. Handy & Cady are water-colors by your own dear Paul C. Lautrup; splendid tones; fine texture, and a brilliant handling of shadows, and only one fault—no, not a fault, but a peculiarity. Now, I have seen and studied skies for ever so many years, but have never struck a very serene blue one yet, with one intensely and perfectly straight, white riff in it. May be he was thinking of the day of the crucifixion, when "the skies where rent in twain," or, perhaps, he had been eating pretzels.

All these drawings which I have just mentioned, are equal to, if not superior to the much-admired exhibits we have seen at the Salmagundi and League displays. They are well worthy of a day's study; in fact, the whole exhibition is highly interesting, and attracts much attention, and well worth a trip to Minneapolis to see.

I have tried to describe what I saw, and you have, perhaps, received a faint impression of what there really is, but the pen is so inadequate to such a task that a few illustrations of the best would be, I think, much more interesting to your readers, for you know that: "*Li poeti dipingono con la parole; li pittori parlano con l'opere.*"

The Midland Hotel Disaster.

ON the first day of March, at the hour of noon, two of four trusses supporting the roof over the dining room of the Midland Hotel in course of construction at Kansas City fell. The building was eight stories in height, and built of brick, iron construction, and fireproofed. As one workman was killed, a coroner's jury, assisted by a committee of experts, investigated the causes which led to the disaster. The investigation showed that Burnham & Root, of Chicago, were the architects of the building. A local superintendent was in charge of the work of the firm in Kansas City, and an inspector was employed upon the hotel under his direction.

By the copies of the original and revised plans, placed before the investigators, it was shown that the architects' plans were correct and ample from a construction standpoint. From the investigation, which occupied several

The causes of the accident are then to be found in the pier, which was first to give way, as sworn to by many competent witnesses, diagrams of which are given.

First—The flue, which had in the revised plan been taken from the center and placed on the side of the north pier, was built in the center, in violation of large scale pier diagram.

Second—A considerable percentage of soft brick had been employed, against the architects' instructions.

Third—The plates furnished and set at this point were only 1 foot 9 inches by 1 foot 9 inches, instead of 1 foot 9 inches by 2 feet 3 inches.

From which it is most evident that the combination at one point of these three variations from the architects' plans caused the accident. For not only was the solid bearing of brick destroyed, beneath this plate, but the plate itself was made smaller, and thus the bearing of the truss came on one side of the plate itself—making three causes of weakness all in one spot.

The six gentlemen engaged to investigate and determine the cause of the disaster made the following comments upon the causes and responsibility:

That we believe from the evidence that the falling of said portion of the structure was due to a failure of the brickwork supporting the two easterly trusses over the dining room.

That we believe from the evidence that the falling of said part of the building was not due to or caused by the defects in the revised plans and drawings therefor; but the architects, Messrs. Burnham & Root, were neglectful in that they did not also revise the specifications in such manner as to insure an improvement in the quality of the brick construction in the sixth and seventh stories supporting the two easterly trusses.

That we believe from the evidence as to Walter C. Root, the general superintendent of construction, that by reason of the large amount of work under his charge, which, besides the hotel, included the Exchange building and the American bank building, and that he had given special orders for the proper execution of the work in question, and which orders were disregarded; therefore, it is of our opinion that he should not be held responsible for the failure of said part of the building; but that we censure him for not having made a personal examination of the setting of the plates and trusses thereon.

That we believe from the evidence as to A. B. McKay, the local superintendent of construction in immediate charge of the building for Burnham & Root, architects, in that he was grossly negligent in the performance of his duties for the part of the work in question and in carrying out the special orders given him by Walter C. Root, the general superintendent.

That we believe from the evidence as to Taylor, Seddon & Edwards, the contractors for the brickwork for said building, were grossly negligent in that they did not thoroughly inform themselves as to the particular requirements of the revised plans and as set forth in part of section 3 of the specifications, which provides, "that he will use all diligence to inform himself as to its construction and finish and in no case to proceed with the different parts of the work without obtaining first from the architects at their office, such directions or drawings as may be necessary for the proper execution of the work," and to which negligence we attribute the diminished thickness of the south wall of dining room above the bottom cord of the trusses; to which diminished thickness we attribute the setting of the smaller plates under the south ends of the upper chords of the two easterly trusses.

And further, that with their knowledge of the proposed increased weighting on those parts of the walls, they should have seen to it that extra care was taken in accordance with the last clause of section 4 of the specifications which provides that "No excuse of ordinary care or quality of work will be allowed where the nature of the work requires extra care."

That we believe from the evidence as to Charles Burch, the foreman in charge of the brickwork for Taylor, Seddon & Edwards, that he was negligent and careless in that he did not obey the orders of Taylor to use hard bricks only in the walls supporting the trusses, and that he did not inform himself as to the particular requirements of the revised plans.

That we believe from the evidence as to Hough, Ketchum & Co., contractors for the iron work for said building, in that they were careless by reason of having provided cast-iron plates of diminished sizes from those indicated in the detail drawing therefor, on which the top chords of the two easterly trusses were set.

That we believe from the evidence that Frank Smallwood, the foreman ironsetter for said Hough, Ketchum & Co., was careless, in that he gave to the foreman bricklayer the smaller plates to set under the south ends of the upper chords of the two easterly trusses, after having been told that the larger plates were too wide for the wall as built, and without consulting the detail drawings for the same or informing the superintendent, which, had they been done, would reasonably have led to an investigation revealing the fact that the south wall was 4 1/2 inches thinner than called for in the revised plans.

A. VAN BRUNT,
JAS. G. ADKINS,
O. L. REMICK,
J. J. SQUIER,
W. G. BAIRD,
V. B. BUCK.

This was a fair statement, except that the architects should not have been called even "neglectful" as to specifications, as the evidence shows they were, on the contrary, most careful regarding them—to the extent of having very explicit agreements as to the brick and cement in piers, all of which was clearly shown in the masons and superintendent's evidence, though in the great mass of testimony the coroner's jury seemed to fail to clearly grasp and credit them.

The case was taken up by the grand jury, and they returned a verdict, indicting the superintendent, the inspector, the masons' foreman, and the iron foreman for manslaughter in the fourth degree.

It is noted from the reports of this grand jury investigation in the Kansas City papers that the jury first brought in a written verdict of acquittal for all, but were instructed by the judge to reexamine and report again on general principles. The jury retired to their room, and without reexamination of the building, or of witnesses, returned indictments against those mentioned above, failing to indict either the mason or iron contractor, whose measure of responsibility was certainly as great as that of the general superintendent for the architects.

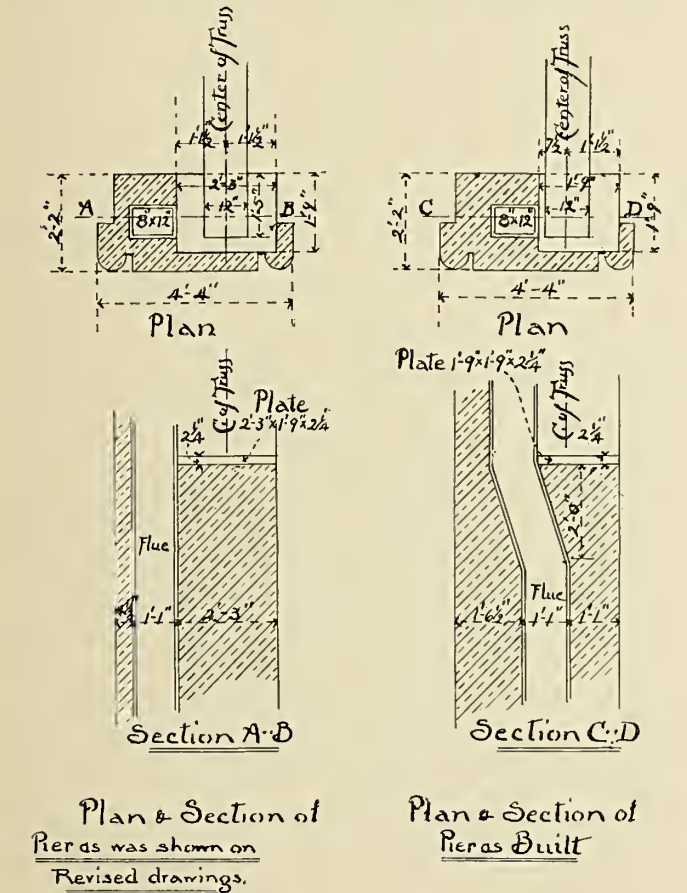
MR. ARTHUR L. TUCKERMAN, of the architectural firm of Weston & Tuckerman, is manager of the art schools of the Metropolitan Museum of New York, and also fills the chair of architecture in that institution. The art schools have been established by the trustees of the Metropolitan Museum of Art, in order to furnish superior opportunities for thorough instruction in design, modeling, color, freehand, architectural, cabinet and perspective drawing, chasing and hammered metal work, carving in wood, etc., to those especially who desire to acquire an artistic education applicable to industrial and commercial uses. They have provided large, new, well-lit and ventilated rooms, in a central position, with superior art material and instruction and a liberal basis of admission. In order to offer all genuine students every facility in their work, a series of lectures have been added, the privilege of visiting the museum free of expense, prizes, diplomas, and opportunities for the sale of meritorious work, so that each one may measure his progress by his own industry and application.

days, and in which a large number of witnesses and experts were examined, the following facts are sifted as those having the most direct bearing upon the causes for the disaster:

First—That when it was determined about May 5, last, to use trusses to support the roof and ceiling of the dining room, which was located on the eighth floor, that revised plans from first story up were drawn and sent to the contractor, who received and used them throughout.

Second—That the general superintendent gave instructions that, whereas the original specification had been in dispute as to the use of a certain percentage of soft or "salmon" brick, under the new conditions only hard brick was to be used for the piers, and that cement was to be used throughout, a written memorandum to this effect being signed by contractor. These instructions the mason acknowledged before the coroner's jury to have received, and agreed with the general superintendent to be careful to keep soft brick out of the piers, placing them only under windows.

Third—That the size of plates under trusses was designed by the architects, 1 foot 9 inches by 2 feet 3 inches.



Illinois State Association of Architects.

A SPECIAL meeting of the association was held February 18, to consider the formulation of a new building law for the city of Chicago. The following architects were present: Samuel A. Treat, Dankmar Adler, Robert C. Berlin, Louis H. Schaub, L. G. Hallberg, Clinton J. Warren, Normand S. Patton, George Beaumont, Fred Baumann, Alfred Smith, O. J. Pierce, S. M. Randolph, Henry Raeder.

The following guests were invited to participate in the conference:

W. J. Edbrooke, Commissioner of Buildings.

The Chicago Fire Underwriters' Association.—Representatives: Edward M. Teall, Wm. R. Kerr, R. N. Trimmingham, secretary; T. A. Bowden, superintendent of surveys.

Citizens' Association.—Representatives: S. D. Kimbark, chairman; James W. Beach, attorney; J. H. McVicker, Fred Baumann, Ed. Gobel, C. G. Dixon.

Real Estate Board.—Representatives: Wm. D. Kerfoot, E. A. Cummings, A. S. Coe.

After the usual lunch, President S. A. Treat called the meeting to order, stating the object of the conference as follows:

The President: Gentlemen, I will state that the Illinois State Association of Architects, in calling this meeting, has extended an invitation to the Board of Underwriters, the Citizens' Association, the Real Estate Board to send representatives to meet with us; also to the building and fire departments of the city, to discuss with us the propriety and to what extent the present building ordinance should be changed, and in what manner. It was our purpose that all who are directly interested in this matter should meet together in conference, in order that there might be harmony of action. I do not know exactly how we ought to proceed, but I think Mr. Adler has formulated a programme, and I therefore call upon him to announce it to you.

D. Adler: Mr. President, I am sorry to say that I have not formulated any programme outlining the course of our proceeding this afternoon, although, perhaps, I should have done so, having been measurably the cause of this meeting. The architects of Chicago, who are generally members of this association, or, at least, this association, composed of the principal practitioners in the city, have felt, with other citizens, that the present building ordinance is inadequate and indefinite, and to a great extent has outlived its usefulness, as while they might have been adapted to the old city of Chicago, they certainly need revision to meet the needs of the new Chicago. Learning that the building department of the city has been invited to frame a new ordinance, we have taken it for granted that that department would be willing to learn our views as architects, and would also be glad to learn the views of the underwriters, the real estate men, the Citizens' Association and fire department, we have extended the invitation to you gentlemen, all, to join us in a conference. Of course, we architects would like to have an ordinance framed so as to call for a high grade of buildings, yet not so restrictive as to make its requirements impracticable. It is to the interest of underwriters to have an ordinance so framed as to call for the construction of buildings that when a fire does occur the damage will be as light as possible, and the real estate men want one that will not prohibit the erection of low-priced buildings in the outlying districts of the city. What we desired was to get the views of these different parties together, and for our deliberations to be guided by the counsel of the building department of the city, so that our action might be in harmony and to the best interests of the citizens at large. I believe, with this end in view it will be best first to hear from the building department of the city.

The President: We would be pleased to listen to Mr. Edbrooke in behalf of the building department.

W. J. Edbrooke: I came here rather to listen than to give any views. I would say I think that most of our business buildings in Chicago are not constructed substantially enough. I notice, generally, when one of them burns out, the walls have gone down in the wreck. Again, I think many are higher than needed, and while it might not be in accord with the ideas of capitalists it would be in the direction of public interest to limit the heights of buildings to a degree of greater safety, and particularly in the direction of buildings that are added to in height after construction. This is a matter of some difficulty to arrange, as also others that will present themselves in the revision of the present ordinance. I would say the building department of the city will be very glad to act in harmony with others having the matter of revision under consideration.

The President: We would be pleased to hear the views of the underwriters.

E. M. Teall: Mr. Chairman and gentlemen, as one of the representatives of the Chicago Underwriters' Association, I wish to say there is no question of more importance to the underwriter than a good substantial building. The underwriters carry the burden of all the citizen property owners. We have now an association comprised of most of the fire insurance companies doing business in the city of Chicago, and we have adopted a system of schedule rates, showing what shall be the standard height of an insurable building, what the thickness of the walls of the structure shall be in proportion to its height, etc. We are bitterly opposed to great high buildings, unless they are made of fireproof material, when they are beyond eighty or one hundred feet high. As most six, seven and eight story buildings are constructed, they are little more than fire-traps, destroyers of life and property. When a fire takes place in one of this class of buildings and is beyond the reach of the fire department it has got to burn down to where the fire department can reach it. We have buildings in this city which are uninsurable on account of their height. I have been asked by your president, since I have been sitting here, if the underwriters would like to have all buildings constructed of fireproof material. I answered him by saying I never expected to see that come to pass in my day. In the future, perhaps, our buildings may be constructed as our best buildings are now constructed, but at present we do not hope for any such state of things and are willing to leave that to the future. As Mr. Edbrooke has said, many of our business buildings are so constructed that when a fire

does occur in one of them it is very destructive. We have an instance in the fire that occurred on Fifth avenue and Adams street. When the fire department arrived the fire was all over the building, and it had to turn its attention to the protection of the surrounding property, as it was useless to attempt to save the building and property. I understand the companies who had risks on that building met with total loss. I do not care to make a speech or to give my views as to what proper legislation would be. I hardly think we will be able to arrive at any definite conclusion until a committee is appointed, to consist of some from the Architects' Association, some from the Real Estate Board, some from the Underwriters' Association, who shall endeavor to formulate an ordinance that will cover the needs of the city as far as may be. I can say the underwriters are deeply interested in this matter and want to assist all they can to so desirable an end.

The President: Has the Real Estate Board any suggestions to offer?

E. A. Cummings: Mr. Chairman and gentlemen, the question of the revision of the building ordinance is one that no organized body of men are so well qualified to discuss as that of the architects of this city. You come daily in contact with its deficiencies, you are cognizant of them. This ordinance is your rule and guide in your business, and the remedies which are necessary your experience will readily suggest; and when we speak of remedies we speak of those that are practical, such as will encourage investment and not prohibit it. However, it would seem as a cardinal principle in the formation of a building ordinance, the greatest possible latitude should be permitted in the matter of building consistent with public safety. The question of building in a great city, when it comes to those buildings that are to be erected in the central portion, is of vital interest. Such buildings, made valuable by the adjoining property, should be constructed so as not to be a menace to that property and those who occupy it, and hence it follows that such buildings, in their construction, should be so regulated as to protect the lives and property of those that are to occupy them, as well as the property adjacent to them; and to this end it would seem that no building should be permitted to be erected of so great height that, when a fire does occur, it cannot be successfully combated by the fire department, unless it be made practically fireproof; that all hotels, theaters, public halls, and such places as people are expected to assemble in, should be made as safe as it is possible to make them, not only in respect to their ability to withstand fire, but in stability as well. The matters of storage, heating, lighting, sanitation, etc., are also matters that should be under more absolute control, as we real estate agents have occasion to know, having found in our experience a great many cases where, to say the least, great carelessness has been noticeable on the part of those who had charge of the construction. There are many other matters of detail that one who is on the outside is hardly qualified to speak of, but which comes within your profession and experience, and of which you are cognizant. There is one thing, however, I want to speak to you about, and that is, the fire limits. There are many people who believe the fire limits should be extended to the extent of the city limits; that there should not be a class of citizen property owners who should have greater privileges than another; that the erection of frame houses would be a standing menace to the city. Now, between the seven miles from the eastern to the outermost western boundary of the city, there are hundreds of acres of land under such restrictions that they must necessarily lie vacant for years. If all property within this city was of the same class, and had the same facilities, there would be good reason for that position. Just outside of the old city limits there are hundreds of acres of land that have never produced a dollar for their owners, and that have been almost eaten up with taxation; while just over the line, Jefferson, Cicero, and the town of Lake, have sprung up thriving and prosperous communities because the workmen have been able to build their homes there, within their means; and it should not be forgotten in considering this question, that the erection of these same frame houses has made an increase in taxable property that would not otherwise have been. As to the claim that frame structures are too great a fire risk, I think the experience of the insurance companies will go to show that those little isolated frame cottages are not among their most undesirable risks, and the aggregate of losses show they are not. I would ask you if there are not other things beside fires to be dreaded in workmen's homes? Isn't there a greater danger from the discontented? Isn't the man who owns his own home a better citizen? Let a man once own his own home and he becomes a defender of law and order, and when votes are counted he is always to be found on the right side. Large cities become the abodes of the very rich and the very poor, and as a consequence, the government is too often controlled by the vicious element. I have never known a workman who owned his own home that was a bad and vicious man. Gentlemen, we are looking forward to be not only the greatest, but the safest city on this continent, and we should be careful not to draft an ordinance so arbitrary as to drive the workmen beyond our borders, to build their homes there at our expense. Mr. President and gentlemen, I thank you.

S. D. Kimbark: Mr. Chairman and gentlemen, I have been invited here as a member of the Citizens' Association, especially as the chairman of the committee to which has been referred the subject of our houses of public amusement. The association has no legal authority, but is anxious to coöperate with those that have, in everything that tends to the welfare of our citizens; and especially are we willing to help the building department all we can in framing a building ordinance which shall make safe the places for the amusement and instruction of people, rich and poor. The committee has drafted an ordinance in reference to public buildings which we are anxious to have incorporated in this bill. We have on our committee as many as two architects, and one member from the Board of Underwriters, and, I think, perhaps two. We have given our special work a great deal of attention, and we believe the draft of the proposed ordinance will commend itself to the building department of the city and to all good citizens. Our work, as I have said before, is especially public halls and theaters.

D. Adler: Mr. Chairman, Mr. Cummings has touched upon a point on which, perhaps, there will be a greater diversity of opinion than any

other in the provisions of a new building ordinance adapted to the wants of the New Chicago. While probably we all agree with him that it is necessary to give the workingman facilities to own his own home, yet those who may agree with Mr. Cummings in this might consider it impracticable to have it in one district permissible to erect frame structures of a certain character, while in others only brick buildings are allowed. This city may be said now to be an aggregation of villages, in parts a howling wilderness. In coming over the railroads from the south, we pass through miles and miles of vacant territory which we are told is Chicago. Now it is folly to presume that on these vacant tracts nothing but brick buildings should be erected. It would be folly to try to prevent the erection of frame structures in those places. On the other hand we have blocks upon blocks of frame houses; blocks with buildings not to exceed three feet apart. The multiplication of them would be a menace to the community at large, and if permitted the privilege would become an injury to the very class whom it was intended to benefit, as the insurance would soon get to be so high in those neighborhoods as to very materially deteriorate the value of the property. Now, it has occurred to me—and I broached the scheme at a previous meeting of this association—that in the drafting a new building ordinance provision might be made for the annexed portion of the city; that outside of a certain point the erection of frame buildings would be permitted under a certain height and a given distance apart, to the extent of covering a half block on alternate sides of the street, and that after these portions were covered then the erection of frame buildings should cease and no other buildings but brick should be erected. It is not necessary on account of expense that workmen's homes should be built of frame, as brick buildings can be built very economically. It should be the aim to reduce the limit of destructive fires as low as possible. We should not forget our great fire of October 9, 1871, was the result of frame buildings, and so, too, the somewhat lesser fire that preceded that and the fire that occurred about a year after. Those three fires show that a large aggregation of frame buildings are a menace to the better class of buildings that may be contiguous to the sections where they may be. Now, we architects, perhaps, desire that the general class of buildings should be a higher grade than others, and might be inclined to too restrictive legislation, but we do not wish to be exacting or to work for other than the best public interest, and it is for this purpose of arriving at some just and proper plan that we have invited the coöperation of you gentlemen, and we, all of us, real estate, Underwriters, Citizens' Association, building and fire department, wish Chicago to become a great city, but we know it can't be built up at once of such structures as we could wish, but we can by wholesome provision that while all the buildings may not be great, they can be, when we cover this twenty-odd square miles of territory, buildings that will not endanger the districts in which they are erected. I should like to hear the views of other gentlemen.

W. D. Kerfoot: Mr. Chairman and Gentlemen, The Real Estate Board is in thorough accord with the architects and the city authorities, in their efforts to prepare a proper fire ordinance for this city, to cover not only the old city limits, but also that embraced in the new territories lately annexed. This question of a fire ordinance, we are satisfied, is not fully understood by the people of Chicago. In the first place, very few of our citizens have any distinct ideas of the exact boundaries of the city limits, and when you tell them that the present city limits, including the new territory lately annexed, stretches away to the westward seven miles, to the southward sixteen miles, and northward four miles, while the southwestern corner of its limits is fully thirteen miles, they will hardly believe it. The majority of the streets running through this vast territory are unsewered, and hence it is impossible to build upon these unsewered streets, brick houses. Our theory is, in locations where there are no sewers, to allow the erection of frame buildings (outside of a prescribed line) to be not over 18 feet in height, and they to front on a line 50 feet from the front or recorded line of the lot, and within 50 feet of each other. By this means the street would be in most instances practically 160 feet in width, and in others 180 feet in width, and whenever one of these unsewered streets becomes sewered, then the ordinance should provide that no additions be made to these cottages or buildings, unless of material other than wood, and should permits be issued to build upon the 50 feet in front of the lot, this permit should only be issued for a brick building or other material not combustible. The great difficulty in regard to the sewerage of our streets, is owing to the fact that the City of Chicago started out on a wrong theory; instead of building all of our sewers out of a general fund, they should have been built by a special assessment upon the property abutting or benefited by the sewer. Now we can hardly get an appropriation for sewers over \$200,000 annually, and the bulk of this money is used in keeping the present sewers in repair. In regard to the fire of 1871, it did not spread owing to the number of frame buildings inside the City of Chicago, but it was owing to the inadequate supply of water. Our mains then were from four to twelve inches, and the large engines then in use could not be supplied with water rapidly enough from these mains. All this has since been changed; we now have water mains from twelve to thirty-six inches, and our fire department can not only put out a fire in a frame building, but when a fire occurs in a cottage, the force of the water literally knocks the building over. Owing to the peculiarity of the clay from which our bricks are made, it is impracticable to build brick buildings with safety outside the sewer district. This clay is filled with particles of limestone, which when burnt becomes quicklime, and buildings built from the ground with this material disintegrate, owing to the fact that the surface water washing against them explodes the brick in the walls, rendering them unsafe. We all know that the prairies which surround this city in spring and fall, are one sea of water, and remain so for days, until the water can find an outlet in the nearest sewer. We have resorted to the expediency of building brick cottages on cedar posts, but these houses are very unsafe, owing to the fact that in the spring of the year, the frost forces the posts out of the ground, and the building cracks from top to bottom. All the territory west of Western avenue since it was taken into the city limits, prior to the fire of 1871, has been lying vacant and unoccupied, and this was all owing

to the lack of sewers. The property owners a few years ago, advanced sufficient money to the city, to build a sewer on Western avenue, and one on Kedzie avenue, and they in a measure have been relieved, but all the property lying west and north of these improvements still remains vacant, and will continue so, unless they can be relieved, either by sewers or a proper building ordinance. These suggestions should have an important bearing in the framing of a new ordinance.

J. H. McVicker: Mr. Chairman, I should be quite as much at home in a medical college as here in an assemblage of architects. I came to listen, not to speak, and I doubt if I can add to the interest of the occasion by talking, as I claim no knowledge in the art of building except so far as it pertains to structures for my business; I am vain enough to think I know how a theatre should be constructed, and while I have, I hope, built my last one, I would say in reference to them and all public buildings wherein large numbers of people are likely to gather—churches, theatres, school-houses, and all buildings for public amusement—their construction should be governed by laws, not arbitrary but firm. Architects in planning such buildings should consider lines of safety as of more importance than those of beauty. The people of America are very nervous, made so by their modes of life and their sensational environments, and my observation teaches me they are becoming more so, and therefore all places erected for them to meet in large numbers should be so constructed as to stairways, outlets, aisles and general comfort as to give the impression at a glance that under all circumstances they are safe. We should fear panic more than fire, as the latter is more easily controlled than the former; but we should legislate to lessen the danger of both by wholesome and simple laws. I have noticed during the discussion a tinge of selfishness on the part of the different interests present. The association I am here to represent exists but for one object: the general good of the entire city, and I think Mr. Cummings struck the main thought for our consideration in claiming that all measures should be adopted calculated to make Chicago a city of homes, and as far as possible induce our mechanics and all working people to become the owners of their homes. The taxpayer is blinded with selfishness who grumbles at the amount of his taxes so long as the money is properly expended in building sewers, extending and improving our water system, and in every way perfecting the sanitary condition of the city. As to who should formulate the laws we require would it not be well to trust the matter to those in authority, making it plain to them that the main desire is to build a city of prosperous homes rather than one for mere profit.

E. M. Teall: Allow me one word. I did not know this discussion was going to take the line it has in regard to extending the fire limits to the lately annexed districts. The discussion arose on the permission to erect frame buildings, and the objection was to continue their construction. There are methods of separating frame buildings to which the Underwriters would not object, but any ordinance that would put no limit to their height and contiguity would be most earnestly opposed by the Underwriters.

W. D. Kerfoot: Mr. Chairman, to get the sense of this meeting I move you, sir, that a committee be appointed from the Board of Underwriters, the Real Estate Board, the Architects' Association and the Citizens' Association to formulate a revision of the present building ordinance and to report at a subsequent meeting.

The President: I would like to have added Mr. Edbrooke, of the City Building Department, and the fire marshal to the committee.

D. Adler: How would you have the committee appointed? I think it would be better to let each association appoint its own committee and that these should form a joint committee.

The President: The motion, as I understand it, is that a committee of three be appointed from each: the Board of Underwriters, the Real Estate Board, the Citizens' Association and the Architects' Association—each association to form its own committee—together with the building commissioner and the fire marshal, for the purpose of discussing and formulating a new building ordinance.

D. Adler: To report at a meeting to be called by the Illinois Architects' Association.

T. A. Bowden: Mr. Chairman, we have had the views of the real estate men who seem to be interested in the erection of frame buildings in the outlying districts, and to the fire Underwriters who are interested in having buildings that will not have to be endangered by fire. Our experience in the outlying districts with fires is that we haven't had water to put them out. Before talking about the character of buildings to be erected in the outlying districts, we had better just talk about the water supply. If we are called to the town of Lake we find there, for a water supply, what the firemen call "a hole in the ground," that is, a four-inch pipe. I think the different committees that are to be appointed by the different associations should consider this matter as well as the ordinance contemplated. In the city we have high buildings, and our experience is, if we have water we can get up to the fires. The next thing to plenty of water to be considered is a slow burning construction, and that is next to fireproofing. I think the main point to be look to is the water supply, and after that is attended to you can consider the matter of frame construction.

The President: It is understood that the committees to be appointed by the several associations will be subject to the call of the president of this association.

On motion, the meeting adjourned.

REGULAR MONTHLY MEETING OF THE ILLINOIS STATE ASSOCIATION OF ARCHITECTS.

The regular monthly session of the Illinois State Association of Architects was held Saturday afternoon, March 3, in the assembly rooms of the association, on Washington street.

Immediately after luncheon, President Samuel Treat called the meeting to order and stated the programmed business of the session.

The Chair: The subject chosen for consideration today is, "The Construction of a Line Wall on a One-Sided Foundation." If any of you gentlemen are prepared to discuss the question without preparation we are ready to listen to you.

F. Baumann: I don't want to discuss a one-sided line wall. I don't want to take any stock in them. I could tell you a story about a line wall of that kind, but I don't want to discuss the matter.

W. W. Clay: Let some one take the affirmative and you take the negative.

F. Baumann: I wish it was in Germany instead of Chicago.

N. S. Patton: What, the story?

W. W. Clay: Let's have the story.

F. Baumann: Well, gentlemen, the story is about a building on North Clark street—

W. W. Clay: In Germany?

F. Baumann: No—Yes, Germany; on the North Side! We were putting up a four-story building on an eight-inch thick foundation of dimension stone. When we came to lay the foundation the owner of the next lot, who had a shanty on it, said we couldn't come an inch on his land, and he staid right there, morning, noon, and night, to see that we didn't. Well, we put in the wall up four feet, and then we made it twelve inches. When the building was up about two-thirds the line wall began to belly, and it looked as if the whole thing was going to spill all over the neighborhood. Well, when we came to look at that wall again the next day the wall had straightened itself. The stone in the foundation had been bought of Walker, who had just opened a quarry, and it was the first strippings, the veneer of the quarry, and wasn't extra stone any way; and when we came to look, the first course of the foundation had broken in two and let the wall of the building right straight down all right. Now, how it came to do that without breaking and damaging the wall is the question. It went right straight back, gentlemen!

The Chair: Mr. Baumann, I believe, you are an authority on foundations. What is your judgment in regard to continuous walls and pier walls?

Here followed a discussion, in which Mr. Baumann declared in favor of a continuous wall constructed somewhat heavier for pier construction, one ton to the foot being about the estimate for proper bearing. It was stated that if the owner of an adjoining lot saw an infringement on his premises he could stop it, but if the foundations were in he would have to prove actual damage.

Mr. Baumann: Mr. President, I have another subject I want to bring before this meeting. There has been a card or paper issued to architects, artists and sculptors by the Grant Monument Association of New York—you have all no doubt received it—inviting competition in designs for a monument to cost \$500,000. They offer so much for the first best design, so much for the second, so much for the third, etc. They don't appear to have a committee yet of judges. Now, I think the most effective way to put a stop to this kind of business is for the architects to speak right out; and I would suggest that the Illinois State Association of Architects prepare and send the Grant Monument Association a proper answer, and have it put in plain English, that it can't be misunderstood. It might possibly bring them to see that that isn't just the way to get what they want, and with the good advice they might conclude to change their present plan and get up a proper competition. It is possible that something has already gone in, but if there isn't I think a protest should go out from this body. Those designs are not called for until July, and there is time enough to do it. They have no committee appointed as yet.

I move that a committee be appointed to draft a proper reply to the invitation of the Grant Monument Association circular, to report the same for action at the next meeting of this association.

N. S. Patton: Let the board of directors draw it up and send it.

F. Baumann: I think if we succeed in getting up a dignified answer to this circular it will have a very wholesome influence on the profession generally.

N. S. Patton: Mr. President, in regard to the object intended to be accomplished—of course we all sympathize with it—but in this particular case the call has been made to architects, artists and sculptors. While the architects through their associations might enter their protest, I am not aware that sculptors and artists have any such associations; and right here comes the thought that may be worthy of consideration, whether a protest and a refusal on the part of the architects to take part in the competition on the proposed terms, would not be simply throwing the competition into the hands of the sculptors and artists and secure to them the work.

The Chair: We do not say we will not go into competitions, but that we will not enter into them unless they are properly conducted.

W. W. Clay: My impression is such action by this association will have a good effect on architects whether they are going into this competition or not. The object is to draw a line as to what shall be considered honorable competitions and those that are not, and that the promoters will understand how best results may be expected. My impression is they expect the very best architects to enter into these competitive schemes, and they are ignorant of the fact that they, as a rule, only get inferior talent. Our desire and aim should be to get this false idea removed.

F. Baumann: I do not know what the intentions of these gentlemen are. If they are building boodlers, then it would not have any effect at all; but if they are honest men, then this answer, if properly worded, will have a good effect, and they will cancel the present circular and put out a new one inviting honorable and legitimate competition. Everybody is disgusted with this method. There was lately an honest competition in the Indiana Soldiers' and Sailors' Monument. The board selected a committee and bound themselves to submit the designs to the committee and to abide by its decision. Seventy-two designs were submitted, and what was the result? The committee found that the best design came from an architect in the city of Berlin, Prussia. The board expected it would go to this country, but it went out of the country.

W. W. Clay: I believe that, as a general thing, those who decide in these competitions do it on the actual merits of the plans; that they are honest in their intentions; but the difficulty is they do not secure the best talent.

F. Baumann: Twenty-five and thirty years ago I was of your opinion, but I have learned in ninety-nine cases out of a hundred they are simply

boodlers and nothing else. You know even in the church competitions there is boodle.

After further reference to the impolicy of this class of competitions, whereby the public has been defrauded of large sums of money through incompetent and designing men, it was ordered that the matter of a proper response to the Grant Monument Association be placed in the hands of the board of directors, to report at the next meeting.

It was also decided that the sessions of the association should begin at 1.30 P.M. hereafter.

On motion, the meeting adjourned.

Western New York State Association of Architects.

THE second regular meeting of the Western New York State Association of Architects, was held at Syracuse, at the Vanderbilt House, February 7, 1888.

The convention was called to order at 2:30 P.M. by James G. Cutler, president. The roll was called by Secretary W. W. Carlin, to which the following members responded:

Rochester: Otto Block, James G. Cutler, J. R. Church, Chas. F. Crandall, O. W. Dryer, Jay Fay, Orlando K. Foote, W. Foster Kelly, Louis P. Rodgers, Wm. C. Walker.

Syracuse: Geo. W. Baxter, E. M. Buell, Chas. E. Colton, Ellis G. Hall, J. H. Kirby, Asa L. Merrick, James A. Randall.

Buffalo: R. A. Bethune, W. W. Carlin, Jesse R. Porter, W. S. Wicks.

Palmyra: Joseph Blaby.

Fredonia: E. A. Curtis.

Elmira: Otis Dockstader, J. Q. Ingham, J. H. Pierce.

Utica: Fred H. Gouge.

Ogdensburg: J. P. Johnston.

Watertown: D. D. Kieff.

Binghamton: T. I. Lacey.

Ithaca: C. Francis Osborne.

President J. G. Cutler then read his opening address as follows:

GENTLEMEN,—The order of business which you have adopted, following a very old precedent devolves upon me the duty, which is at the same time a privilege, of saying a few words before the routine work of the session is taken up. I am not unmindful of the fact that the time at our disposal is very limited, and shall therefore confine myself to the mere mention of but few of the many topics which the occasion suggests, and anything like the discussion of which, even if I could summon the temerity to undertake it, I could hardly expect your patience to survive. I feel that I must express to you my thanks for the complimentary vote, in consequence of which I stand here to open the proceedings of this the second meeting of the Western New York State Association of Architects. I am conscious that it was to your respect for the American Institute of Architects of which, at the first meeting of this society, I happened to be the only member present, rather than to any personal considerations, that I am indebted for the honor incidentally conferred upon me, and I hope that this sentiment of regard for the oldest architectural society in the United States, and the fact that several of the members recently elected are also members of the Institute, may lead, at no distant day, to the formation of a Western New York Chapter of the Institute, with which many of the members of this association will connect themselves.

I am tempted to talk a little about the important plan for the consolidation of the architectural societies of the country, now under active and promising discussion by the committees of the Institute and the Western Association, but the questions involved are too important and comprehensive for presentation in the time at my disposal, and I reluctantly leave them with the bare statement that such discussion is going on, and with considerable probability of ultimate success. To all who understand and feel the importance of organized effort and association, and I assume this will include every reputable architect in the country, this idea of a National Society of Architects must be an attractive subject for reflection and anticipation. Did time permit, I should be glad to present some argument in support of the proposition that the association of architects in organized bodies, like the one represented here today, is not limited in its good effect to the advancement of the welfare of its members, but that, by promoting free interchange of ideas, inculcating a higher standard of practice, and increasing the sense of personal responsibility, it extends its benefit to the community at large; and how much every center of population is affected by, not simply the ability of architects to do, but the sense of obligation to do the right thing in the right way, need not be enlarged upon in addressing these to whom the expending of large sums of money for persons whose only ideas of building are sentimental rather than practical, is an every day experience.

Of course this thought suggests that some method of protecting the public from architectural quackery would be desirable both for it and also for the architect, who having qualified himself to do the best work, and inspired by a determination to maintain for himself a high standard of professional responsibility, finds himself estimated by the public, from which his business must come, on an equality with the manufacturer of drawings, who has now the same legal right to call himself an architect, and whose sense of responsibility is strictly limited to getting out of a given piece of work all there is in it in the way of emolument.

Fortunately for the public, and fortunately for the architect who sets out to maintain the professional idea, the empiric in architecture, though not yet extinct, is becoming rarer every decade, and should the next ten years fail to retire him from the field in consequence of such legislation as will provide a reasonable standard of qualifications, to which every person proposing to practice architecture must first conform, I am not without hope that the growth of societies like our own (as now going on so rapidly in all parts of the country), and the influence of the more generally diffused architectural education, will render him comparatively harmless. Old things are indeed passing away. The time, distinctly remembered by many of us, when the so-called architect usually entitled "and builder," pursued a policy of strict non-intercourse with the establishment over the way, as necessary to preserve inviolate the mysteries of the craft or trade, when a house was a house, and a house with a wing was a house and a half; when to be able to inscribe an Ionic volute was to be accomplished, and to understand the elements of full circle stairs constituted greatness; when education in architecture was limited to a period of work as carpenter and joiner, and in the case of a very literary subject, a course of Nicholson's dictionary of architecture—all this is gone, not to return, and in its place we have architecture where it should be, estimated as a profession for the successful practice of which a serious course of well-defined study is prescribed, and for instruction in which many leading institutions of learning now maintain able and well qualified professors. In this work our own state has taken an advanced place, and you are all familiar with what is doing in this way at Columbia, at Syracuse, and at Cornell. Following close on the education of the architect, and perhaps more important to the profession than has yet been fully understood, come the schools of technical education in the trades. No good art work in architecture is possible without the highest technical skill on the part of those into whose hands the architect must intrust his design. It does not seem necessary to advance argument to show that the tendency of trade unionism so widely prevalent at the present time, is to carry the process of leveling down a good workman to the standard of the incompetent, to an alarming extent, and I believe that the remedy is to be looked for in trade schools, where an American born youth can be taught the dignity of labor, and at the same time acquire such skill as will assure him the highest wages because his labor will be worth the money. I am, of course, aware that I am stating this question only as it affects the profession in one particular, and while not unmindful of the fact that the decay of the skilled artisan is only an incident of the trade-union movement, not its object, I have no wish to go into the other phases of the matter. I am proud to say that it is to a townsman of my own, the Hon. Hiram Sibley, that Cornell University is indebted for the means to carry on the work of its trade school. If it should seem to you that there is anything in the suggestion that in such education is to be found a remedy for a lack of skilled workmen, can you not do something to inspire the founding of such schools in the communities in which you live, or emphasize the value of those already established?

The very large and encouraging increase in our membership since the last meeting seems to indicate a confidence in the aims of the society on the part of our professional brethren in this part of the state, and justifies the expectation that it will go on its way to increasing growth and usefulness in the future. I believe that the high and increasing consideration now so generally shown to the architect in the centers of civilization, is largely due to that mutual esteem and respectful consideration which has been fostered among architects by association and organization. I think we may take it to be true that the community in which we live will not be likely to entertain for us any higher consideration than we are willing to show for each other, and I commend this thought to the careful consideration of each member of the society, as being the key to the solution of the problem of still further advancement in this direction in this part of the world. But I restrain my inclination to elaborate this theme, and will close with a word as to some matters which are to come before you today for discussion.

At our first meeting the time available for the work of framing a constitution and by-laws was much too brief, as was evidenced by certain defects made manifest in them when subjected to the test of actual use. The improvements proposed by the executive committee are most of them formal and need not detain us here even long enough for their recapitulation. More important is the suggested change in the mode of electing new members. As now provided for, a member elected today, unless he happened to be a resident of Syracuse, would not participate in this meeting, and might easily be a member three months before he would enjoy such intercourse with his fellow-members. The letter ballot in use by other similar Associations seems the natural substitute for the present plan, and to be open to no serious criticism.

I have doubts in my own mind as to the wisdom of holding the June meeting. We shall be too busy at that time to do justice to it, and I fear the effect of a lightly attended meeting would not be a good thing to risk at so early a stage in our existence.

I am sure that I should not be forgiven by the other Rochester members of this society if I omitted to say at this time, that it was and is a source of great regret to all of us that the absence of any preliminary consultation on our part, and the brief stay of visiting members in our city, combined to deprive us of the privilege of imparting to that meeting more of the social and friendly character which has been so gracefully given to the present gathering.

In a society composed of members residing at points remote from each other, the routine work of the organization must necessarily be done by a small representative body, holding regular meetings. This has been provided for, as you know, in our case, and the Executive Committee of the society has carried on its business in a series of meetings, which have been fully attended and characterized by the highest interest in the welfare of the society. It is no disparagement to the other workers to say that we are specially indebted to our secretary, Mr. Carlin, who has devoted himself to the business of the society with an enthusiasm which entitles him to our warmest thanks. The report of the Executive Committee will give you more in detail an account of its work, but I may be permitted to point out that the increase of membership since the last meeting is evidence not only of confidence on the part of the profession in the aims and work of the society, but of faithful service done by the Executive Committee, of which being only *ex-officio* the presiding officer, I feel I may speak in this way without impropriety.

In conclusion, I thank you for your attention to my rambling talk, and congratulate you on the fact that we are assembled in the beautiful city of Syracuse; of course you will not expect me to admit that it is as beautiful as Rochester, but most interesting in its admirable and constantly improving architecture, famed for its hospitality, its university, and although it must of necessity be taken *cum grano salis*, a place of meeting which I know we shall enjoy, and of which we shall take away with us only pleasant recollections.

The minutes of the last meeting were then read by Mr. Carlin, the secretary, and approved.

The treasurer, C. E. Colton, read his report, which was referred by the president to an auditing committee, consisting of O. K. Foote, of Rochester; R. A. Bethune, of Buffalo, and T. I. Lacey, of Binghamton.

The secretary then read the report of the Executive Committee, which stated that four meetings had been held and nine applications for membership reported favorably upon. The committee also recommended the following names to the association for election as honorary members: Prof. Chas. Babcock, of Ithaca, and Prof. Geo. F. Comfort, and H. N. White, of Syracuse, which were elected by letter ballot. The Executive Committee also recommend a revision of the constitution and by-laws. Those in the constitution affect sections 2, 6 and 7, and in the by-laws, articles 1, 3, 7, 8, 9 and 10. A recommendation regarding the publication of association matters, on motion, was referred to a special committee of three.

A paper on "The Training of an Architect," was read by Prof. C. Francis Osborne, of Cornell University, and on motion of Mr. Block, seconded by Mr. Bethune, a vote of thanks was passed to Mr. Osborne for his able and instructive paper.

The president introduced Mr. E. Kuichling, of Rochester, who read a paper on "Town sewerage in relation to civil architecture," and on motion, a vote of thanks was passed for the excellent paper read by Mr. Kuichling.

Prof. G. F. Comfort, of Syracuse University, made an excellent address, which was also received with a vote of thanks from the assembly.

The recommendations of the Executive Committee were then taken up, discussed and disposed of, after which the convention adjourned.

A banquet was given the visitors by the Syracuse architects, which was a very enjoyable affair. The tables were most elaborately and tastefully arranged, the menu excellent and the menu card unique, having on one side a design by H. R. Kimball, of Buffalo, and on the reverse side a space for the autographs of the guests.

C. E. Colton, of Syracuse, in a few fitting remarks, welcomed the guests, and E. M. Buell occupied the toastmaster's chair.

The speeches of the evening were all instructive, some witty, and were delivered by the following gentlemen: Chancellor Simms, Syracuse University; Prof. Comfort, of Syracuse University; W. W. Carlin, of Buffalo; C. Francis Osborne, of Cornell University; J. Q. Ingham, of Elmira; J. G. Cutler, of Rochester; and Dr. Little, of Syracuse.

The convention adjourned to meet the first Tuesday in October next, at Buffalo.

Association Notes.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The usual fortnightly meeting of the association was held February 9, the president, Mr. Hippolyte J. Blanc, in the chair. After the usual preliminary business a paper on "The Medieval Monastery and its place in the History of the Industrial Arts" was read by Professor G. Baldwin Brown, M. A. Emphasis was laid on the value of tradition in the practice of the industrial arts. Our recent failures in artistic matters, illustrated by the jubilee coinage, which was in its own small way a national disgrace, showed that we had much ground to make up. The introduction of machinery seemed to have robbed us of much of the advantage which a continuous artistic tradition secured to the workers of the past. Nowhere could the working of sound artistic traditions be better studied than in the productions of the monastic workshops of the middle ages. These were generally excellent in style and were much better models for the modern workman

than the brilliant, but misleading examples like the bronze gates of Ghiberti, reproduced in all our museums. The general life of a medieval monastery would be illustrated from the data furnished on the famous plan of St. Gall; and ample details about the practice of the arts in conventual workshops were furnished by the *Schedula Diversarum Artium* of Theophilus Bishop, Bernward of Wildesheim and the Monk Tutilo of St. Gall were examples of the monastic artist in different grades of rank. The artistic productions of the monastery were then reviewed and the excellence in style of treatment and choice of motive explained by the close connection in those ages of the industrial arts with architecture. Some technical details from Theophilus were added and the paper closed with a few practical suggestions for the improvement of our artistic industries. A hearty vote of thanks was accorded to the professor for his paper.

ASSOCIATION OF TENNESSEE ARCHITECTS.

The Association of Tennessee Architects have decided to hold the next meeting of that body at Nashville, and the following circular has been issued by the secretary:

NASHVILLE, Tenn., February 6, 1888.

At a called meeting of the Association of Tennessee Architects, held in Nashville on February 3, it was decided to defer the annual meeting of the Association until Tuesday, March 20, and change the place of meeting from Memphis to Nashville.

Will you kindly state on the enclosed postal card whether you can, or cannot, be present with us on that date, and mail same to Mr. Ed. Laurent?

The association has made the above change with extreme regret, and has done so only because so few architects outside of this city appear to take interest in the organization.

The architects of Nashville are willing to hold the annual meetings in any city in the state, providing architects of other cities manifest a proper interest in the association.

Cannot you lend your aid and countenance by attending the March meeting here? Let us have a rousing meeting, and place ourselves in the line of professional advancement with associations of sister states.

T. L. DISMUKES, Secretary, A. T. A.

NEW YORK CHAPTER OF AMERICAN INSTITUTE OF ARCHITECTS.

At a meeting of the New York Chapter of the American Institute of Architects, held February 2, the following resolutions were passed:

WHEREAS, The Commissioners of the Sinking Fund of the city of New York have, under authority given to them by an act of the legislature, entitled an act to provide for the erection of a building for criminal courts, and other purposes, issued an invitation to architects to prepare plans in competition, in accordance with certain printed instructions and general plans:

The New York Chapter of the American Institute of Architects, having at heart the proper architectural embellishment and future architectural standing of this metropolis, believe it to be their duty, which they owe to the municipal officers, to the citizens, to the profession of architecture, and to themselves, to earnestly advise against the adoption or execution of any plans based upon the instructions and general plans issued, and would recommend to the commissioners, if it is still their determination to place the proposed structures on the City Hall park, in contiguity to the city hall, that sufficient extension of time be granted, and the following conditions be observed:

First. That the manner of grouping the buildings, and the planning and distribution of the rooms be left to the competitors, limited only by the specified requirements of space for the various departments, etc., to be accommodated.

Second. That disinterested professional experts, who should be architects of acknowledged ability, experience and standing, should be appointed to whom all the plans would be referred for analysis and classification, and who would make a detailed report to the commission for their consideration, with recommendations as to the award of premiums and choice of plans.

Third. That the successful competitor should be appointed architect of the building; provided that in case he should not be, in the judgment of the said experts and commission, a person of sufficient artistic or constructive or administrative capacity, then there shall be appointed an associate or consulting architect, so qualified, whose compensation shall be deducted in equitable proportion from that of the architect.

A true copy.

A. J. BLOOR, Secretary, A. I. A.

NATIONAL ASSOCIATION OF COMPOSITION ROOFERS.

The National Association of Master Composition Roofers held its annual convention at Chicago, February 15. The following officers were chosen for the ensuing year: M. W. Powell, Chicago, president; E. S. Bortie, Philadelphia, first vice-president; Hugh Huntington, Cleveland, second vice-president; W. K. Thomas, Chicago, secretary; H. R. Shaffer, Chicago, treasurer. The newly-elected Board of Directors include, G. W. Gitchell, Chicago; John M. Sellers, St. Louis; J. L. Jones, Chicago; H. M. Reynolds, Grand Rapids; and Mr. Murdoch, Chicago. J. Wilkes Ford, of Chicago, W. S. Hayes, of New York, and E. A. Kimball, of Chicago, were appointed as the committee on legislation. The committee appointed to draft a specification for an improved style of roofing, to be recommended by the National Association to the consideration of architects and builders throughout the country, reported, showing the details of an improved method of construction. Before adjournment it was decided that the next annual convention would be held in Cleveland the last Tuesday in January, 1889. There are about three hundred men employed, it was reported, in the roofing business in the city of Chicago, and nearly as many in Philadelphia and in the larger cities throughout the country.

Mosaics.

CORNELL UNIVERSITY has fifty-five regular four-year students, fourteen special two-year students, and two resident graduates in its architectural department.

ARCHITECT JOHN H. COXHEAD, formerly of Chicago, has opened an office in St. Paul, Minnesota. Mr. Coxhead, who is well and favorably known in Chicago and the East, merits the success which will no doubt be his.

THE architectural firm of Thomas & Rodger, of Chicago, have dissolved, C. P. Thomas retaining the old stand and business of the firm and John Rodger opening an office in the Cisco building, 84 and 86 Washington street.

SEVEN cheap excursions to the West have been organized by the "GREAT ROCK ISLAND" route. Take advantage of the series of cheap excursions to Kansas, Nebraska, Northwestern Iowa, Minnesota and Dakota, leaving Chicago March 20, April 3 and 24, May 8 and 22, June 5 and 19. Rate, one fare for the round trip; tickets first-class, and good for 30 days for return passage. Do not fail to take advantage of this opportunity—you may never have such another. Be sure your tickets read via

Chicago, Rock Island & Pacific Railway, which has its own lines to principal points in all these states. For rates and full particulars, address E. A. Holbrook, G. T. and P. A., Chicago, Ill.

THAT the merits of Frink's reflectors are thoroughly appreciated by architects is shown by the large number of prominent art galleries, theaters, churches and public buildings that are adopting his system of reflectors and reflecting chandeliers for lighting.

CALLING attention to the advertisement of the Tiffany Pressed Brick Co., in this paper, we are told that it is the only "ad" that this company has in any journal. A constantly increasing demand, already reaching to Minneapolis, St. Paul, Duluth, Omaha, New York City and other markets, is absorbing the Tiffany product as rapidly as it is ready for market. The company is constantly enlarging its works.

THE March *Century* contains the story of "Colonel Rose's Tunnel at Libby Prison," told by one of the one hundred and nine Union officers who escaped on the night of February 9, 1864. The successful construction of this tunnel, dug from a dark corner of the cellar of the prison, through fifty feet of solid earth—the only tools being two broken chisels and a wooden spittoon, in which to carry out the dirt—was one of the most remarkable incidents of the war.

AMONG the most talented of the draftsmen members of the Chicago Architectural Sketch Club has been Mr. Ashton Pentecost. For several years he has had charge of the office of Architect Alfred Smith, and now has begun practice for himself, entering upon a partnership with his brother, D. S. Pentecost, who is a well and favorably known architect. Mr. Pentecost enjoys the best wishes of his friends, and the public will be benefited by the entering of one more reliable architect into the practice of his profession.

THE Builders' and Manufacturers' Benefit Association is the title of a life insurance association on the assessment plan, organized in New York, February 8, 1882, by a number of Master Builders and prominent manufacturers, for the purpose of furnishing employes connected with building and other laboring classes with cheap life insurance. The risks are taken on individuals, in good health and of good habits, from twenty to sixty years of age, which are divided into three classes, affording an insurance in case of death from \$1,000 to \$3,000. Mr. Jno. J. Tucker, a leading builder of New York, is president of the association; and, among the vice-presidents, Mr. T. E. Yates, of the Big Sandy & Lexington Railroad Company, or Mr. A. J. Bicknell, of No. 239 Broadway, New York, the secretary, may be addressed for full information in regard to the enterprise.

Synopsis of Building News.

Argenta, Ark.—Architect B. J. Bartlett, of Little Rock, has prepared plans for a two-story brick school building, 40 by 60 feet; cost \$5,000.

Chicago, Ill.—Plans are being prepared by Geo. O. Garnsey for alterations to the Honoré building, which is to be fitted up for a hotel at an expense of about \$350,000, for A. J. Cooper and others who recently purchased the building. It is expected the work will commence very soon.

Plans are being prepared by Architect E. Baumann for remodeling the old Chamber of Commerce building, recently purchased by Hannah, Lay & Co., which is to be converted into a twelve-story office building.

Architect H. B. Wheelock: For Rev. Thos. C. Hall, two-story and basement and attic residence, 31 by 55 feet; brick and brownstone, slate roof, hardwood finish; cost \$8,000.

Architects Flanders & Zimmerman: For W. J. Evans, three-story store and flat building, 73 by 25 feet, brick and stone; cost \$8,000. For Jonathan Clark, six-story rock-faced stone warehouse, 60 by 140 feet, at 1523 to 1527 State street; cost \$80,000.

Architects Edbrooke & Burnham: For John J. Hall, three-story brick and terracotta store and flats, 23 by 82 feet; cost about \$9,000.

Architect P. W. Ruehl: For C. Barin, three-story and basement store and flat building; cost \$8,000. For P. Brennan, two-story and basement and attic residence, all modern improvements; cost \$9,000. For R. McGuire, two-story and basement flat building; cost \$7,000.

Architect Wm. Thomas: For F. J. Wilson, two-story flat building, 46 by 64 feet, brownstone front; cost \$18,000.

Architect E. S. Jennison: For first regiment I. N. G., four-story armory, 284 by 171 feet, brick; cost \$200,000.

Architect S. S. Beman: For St. Paul *Pioneer Press*, twelve-story brick and granite office building, 124 by 120 feet; cost \$500,000. For Lutheran Society at Pullman, Illinois, brick and stone church building, 50 by 70 feet; cost \$15,000.

Architects Burling & Whitehouse prepared the plans for the building of Mr. J. H. Swart, which was recently gutted by fire and is rapidly being rebuilt at a cost of \$10,000.

Architect M. L. Beers: For J. J. Schobinger, brick residence; cost \$6,000. For Mrs. Addie Burget, pressed brick residence; cost \$5,000.

Architects Holabird & Roche: For L. D. Webster, four-story store and office building, 100 by 125 feet, on West Madison street. The building will also contain a music hall; cost \$80,000.

Architect L. H. Marston: For Wm. Iliff, three two-story brick and stone dwellings, 50 by 60 feet; cost \$15,000.

Architect W. H. Drake: For J. W. McCaskey, three-story stores and flats, 54 by 56 feet; cost \$15,000.

Architect L. B. Dixon: For Geo. H. Fox, three two-story brick and stone residences, 135 by 28 feet; cost \$20,000. For Mrs. M. Livings, two-story flats, 40 by 70 feet; cost \$10,000.

Architect John H. Wagner: For Luman Allen, five-story brick, stone and terracotta building, 50 by 105 feet; cost \$60,000. For G. A. Hyers, three-story warehouse, 20 by 100 feet; cost \$10,000.

Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall. Well, the National Association of Builders' Convention has come and gone, after a most profitable session, leaving behind it, I hope, a lasting effect. A most happy fraternal feeling prevailed throughout, and the essays read were beautifully "and wonderfully made," or rather more properly—written.

We gave them the best that the pantry afforded, with the invitation to call again. The same hopeful feeling as regards business prospects continues.

The ground for the city hall has been broken, and the process of erection will go rapidly ahead.

Architect S. E. Des Jardins has returned from Europe looking better for his European trip. He enjoyed himself hugely, and brought home three hundred exquisite photographs of castles, cathedrals, and other architectural subjects in France. He is tolerably busy.

C. E. Walton, M. D., is about to erect quite an ornamental residence at Hamilton also. The first story will be brick, the second story cement, and the house contain twelve rooms. The roof will be a gambrel shingle roof, and is quite picturesque.

Architects Crapsey & Brown report the following work: For the village of Westwood, Ohio, a town hall, 90 by 122 feet; first story brick, second story cement, with slate roof. In this building will also be a station house, fire engine room, and halls for common council. Upstairs will be two halls, one 63 by 51, and the other for concerts, 30 by

30. There will also be a gymnasium and Y. M. C. A. hall; cost \$17,000. This firm seems to be perfectly at home in this class of work, and churches especially. G. W. St. Clair, Hamilton, Ohio, will erect a frame house of nine rooms, with slate roof. The finish will be of quartered oak; cost \$5,000.

Architect H. E. Siter has the following under way, in addition to other important work: For the Board of Education, a school building of eighteen rooms to be erected in the twelfth ward. It is three stories high, built of brick, with stone trimmings and slate roof; size 66 by 140 feet; cost \$50,000. The building when erected will be a valuable addition to our fast-improving school architecture. For Thomas Lee, a store and flats building, pressed brick front, with an ornamental copper bay, tin roof; cost \$10,000; outlook reasonably fair.

Architect Geo. W. Rapp is busy on the Addyston Iron and Pipe Co's buildings. He has prepared working drawings for the cleaning and testing building, of iron and wood construction; size 102 by 227 feet; also the machine foundry for casting purposes, of brick, stone, and iron; size 81 by 227 feet; prospects fair.

Architects Saml. Hannaford & Sons report the following work on the boards: Residence for T. L. Griffith, brick, two and a half stories high, with slate roof, ten rooms, and pine finish. Apartment house for Chas. E. Iliff, brick, four stories high, with tin roof. The Big 4 (1. C. St. L. & C.) R. R. will build an immense freight depot, 150 by 800 feet, of brick and iron. American Cotton Oil Co. will build two buildings, one of brick, four stories high, 60 by 174 feet; the other a frame building for cooper shop, 48 by 60 feet. G. H. Burroughs will build a frame house two and a half stories high, of frame, with slate roof.

The following are the bids on the new city hall:

Excavating, foundations, brick and stone work, D. Hummel.....	\$326,500
Fireproofing, Finnigan & Co.....	18,645
Ironwork, M. Clements & Co.....	125,700
Copper and Virginia slate, Jas. Hunter & Co.....	17,498
Interior concreting, P. T. Scahill.....	10,475
Asphalt, F. Schillinger.....	2,900
All Cincinnati men except the last.	

Colorado Springs, Col.—Architect F. T. Lent reports: For W. H. Sanford, residence, 44 by 80 feet; cost \$12,000; under way; Joseph Dozier, builder. For John De Witt Peltz, residence, 30 by 56 feet; cost \$10,000; projected. For Otis & Waerman, two residences; cost \$11,000; under way; A. H. Harrison, builder. For Chas. B. Cowell, residence, 32 by 42 feet; cost \$5,000; under way; A. H. Harrison, builder. Also several dwellings, etc., to cost \$2,000 to \$2,500 each.

Columbia City, Ind.—Architect B. S. Talan, of Fort Wayne, reports: Contract for the Whitley County Court House was let, February 3, to Jos. S. Baker, of Warsaw, for \$124,700. Three story stone and iron construction, 112 by 96 feet.

Council Bluffs, Iowa.—Architects Allen & Bell are preparing plans for N. Merriam, for a store and office building, to cost \$60,000. Work will be commenced at once.

Mr. Sol. Foster is about to build a flat building, to cost \$15,000. Prospects for an active season are very flattering.

Crawfordsville, Ind.—Architect W. L. Carroll, of Chicago, Ill.: For W. P. Herron, two-story frame residence; cost \$15,000.

Cresco, Iowa.—Architect F. D. Hyde, of Dubuque, reports: For Cresco Union Savings Bank, three-story and basement bank and office building, 25 by 80 feet; cost \$9,000; plans completed.

Denver, Col.—Architect William Quayle has completed plans for the Board of Education for a two-story school building, 84 by 90 feet; cost \$30,000. Also preparing plans for a two-story and basement school building, 107 by 150 feet; cost \$80,000.

Architects F. E. Edbrooke & Co. have prepared plans for the Exchange Building; \$200,000. Stock has been subscribed, and it is intended to push the building at once. The syndicate is known as the Exchange Building Association. Among the heaviest stockholders are F. L. Dana, editor of the *Denver Exchange Journal*; T. W. Herr & Co., Henri R. Foster, A. S. Pettit, A. C. Fisk and Hicks & Bailey.

Among the building permits recently issued are the following contemplating an expenditure of \$4,000 or over: W. E. Stone, two-story brick dwelling, 33 by 45 feet; cost \$5,000. A. J. Scott, two-story double brick dwelling, 45 by 48 feet; cost \$4,500. Mrs. C. S. Silver, two brick dwellings, 25 by 40 feet; cost \$5,000. Geo. H. Higgins, brick dwelling, 23 by 45 feet; cost \$4,800. A. S. Miller, two-story brick terrace; cost \$15,000. H. C. Dillon, three two-story brick dwellings, 32 by 48 feet; cost \$10,000. Mrs. H. Evans, two-story double brick dwelling, 48 by 68 feet; cost \$10,000. Woman's Hospital, two-story brick addition; cost \$8,500.

Detroit, Mich.—Present condition is an improvement on the past month, and the outlook is excellent.

Architect A. Bloquelle: For Art Stone Co., two-story brick and frame foundry, 70 by 158 feet; cost \$3,000; John Vandergyp, builder.

Jos. Keugel is building, for himself, a block of nine two-story brick stores and dwellings, 171 by 46 feet; cost \$10,000.

Architect A. C. Varney, for himself: Two-story brick double dwelling, 33 by 52 feet; cost \$3,000; Holland & Son, builders.

Architects Hess & Rascaman: For G. A. Whitney, two-story frame dwelling, 32 by 48 feet; cost \$2,700; Phil. Cook, builder.

Henry Carew is building, for S. J. Murphy & Co., a two-story brick shop, 55 by 120 feet; cost \$4,500.

Architects Scott & Co.: For Henry Carew, two-story brick double dwelling, 42 by 64 feet; cost \$9,000; Henry Carew, builder.

A. Corbeille is building, for himself, three three-story frame dwellings, 20 by 52 feet each; cost \$4,200.

Architects E. E. Myers & Son: For St. Phillip's Episcopal Society, frame church building, 50 by 52 feet; cost \$4,000; R. Helson, builder.

Van Leyen & Preston, together with Mason L. Brown, civil engineer, of Detroit, moved, January 1, into their new suit of offices in the Burns Block, No. 90 Griswold street, being expressly fitted up for the business with general office, private office, large light drafting room, storage closet, etc., all complete, in special design is one of the most attractive offices in the city.

There were 120 permits issued for new buildings to cost \$101,455; alterations, cost \$8,300; total cost \$109,755.

Architects Donaldson & Meier report: For Dr. F. W. Clawson, three-story brick and stone dwelling, 25 by 45 feet; cost \$5,000, under way. For Peter Smith, two-story brick and stone dwelling, 24 by 65 feet; cost \$5,000; Gideon Vivier, builder.

Architect W. G. Malcomson reports: For Dr. Pulling, double two-story brick and stone dwelling, 44 by 65 feet; cost \$6,000; J. M. Martin, builder. For O. Wardell, three-story double dwelling, 48 by 65 feet, brick and stone; cost \$7,000.

Wm. Storrs is building for himself five one-and-one-half-story frame dwellings, 24 by 52 feet each; cost \$4,300.

John J. Duryea is building a two-story brick dwelling, 30 by 52 feet; cost \$4,000.

Architects Scott & Co. report: For S. F. Young, two-story brick and stone dwelling, 27 by 50 feet, slate roof; cost \$6,500; J. E. Boomer, builder.

Henry Hubler is building five one-story frame dwellings, 22 by 42 feet each; cost \$3,800.

Robert Balton is building a three-story brick and stone dwelling, 25 by 46 feet; cost \$6,500.

Henry Carew is building machine shops, etc., for the Peninsular Car Works; cost \$7,500.

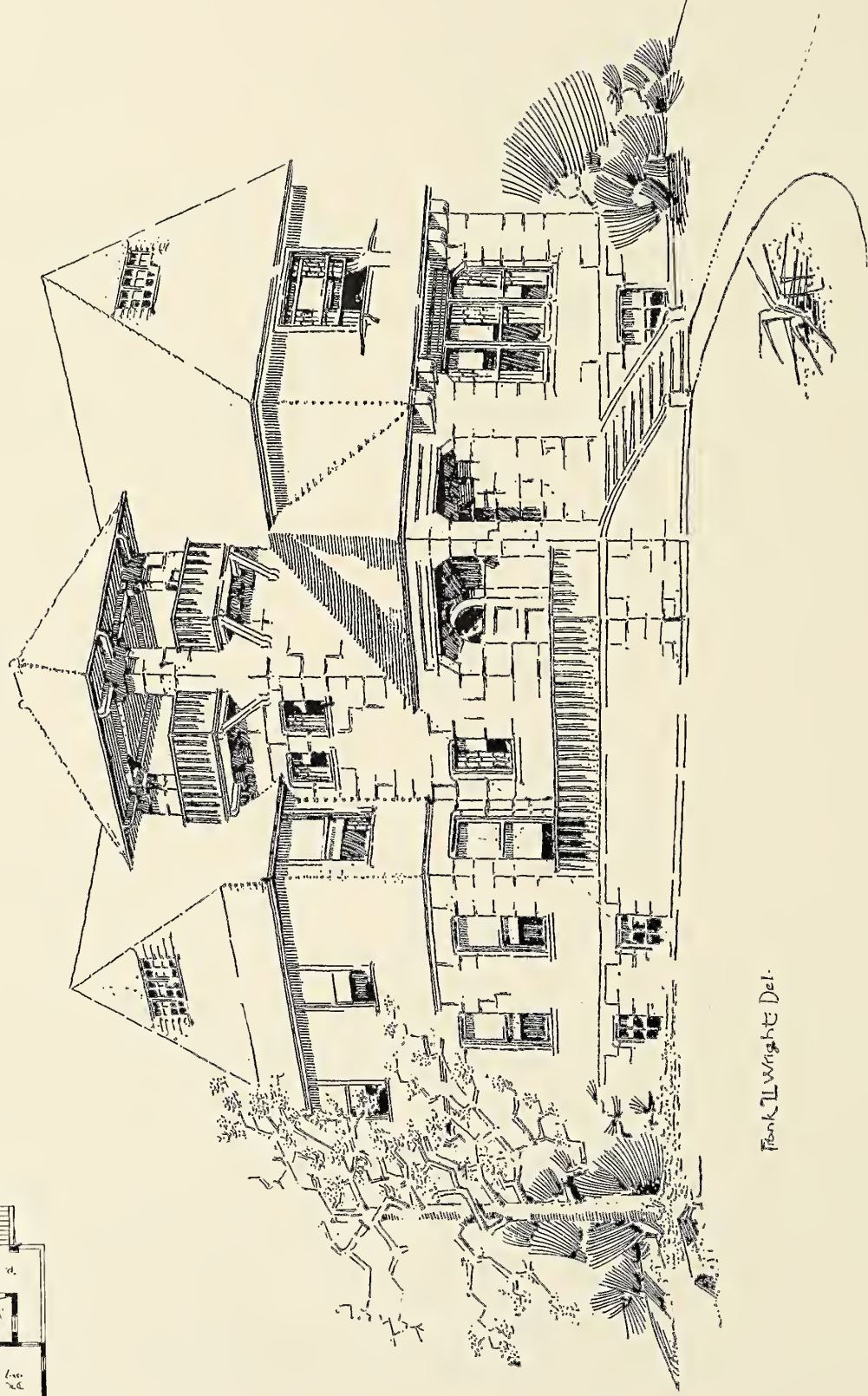
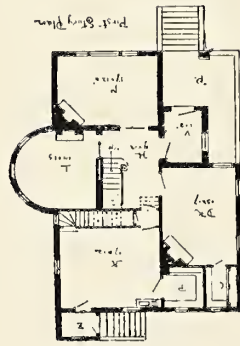
During the month of February there were 162 permits for new buildings to cost \$158,405; 17 permits for alterations to cost \$9,325; total cost \$167,730.

Dubuque, Ia.—Architect F. D. Hyde reports: For Byrnes Bros., two-story and basement brick livery stable, 102 by 100 feet; cost \$13,000, under way. For C. J. Lesure, two-story frame cottage; cost \$5,000; contracts let. For Dubuque Water Works Co., one-story brick pumping station, 40 by 50 feet; making plans. For W. R. French, Waterloo, two-story frame cottage; cost \$2,500; making plans.

Fort Smith, Ark.—Outlook good, and building will probably equal if not exceed the amount of last year.

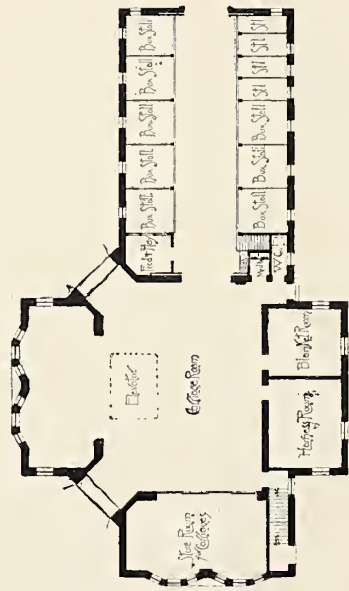
The county court house is well under way and will be finished by fall.

Architects Wm. H. Byram & Co. report: For Thos. B. Latham, brick residence, furnace heat, metal roof; cost \$9,000. For Judge Jas. F. Read, frame residence, to cost \$4,000. For Thomas Davis, frame dwelling; cost \$3,000. For school board, brick and stone school building; cost about \$18,000; plans completed. For Wm. Breen, four-story and basement office building, 70 by 103 feet, steam heat, elevator, etc.; cost about \$35,000; projected. Also four business houses to cost about \$30,000; projected. Also a double, three-story wholesale building to cost about \$15,000. Several small dwellings; costing from \$1,000 to \$5,000.

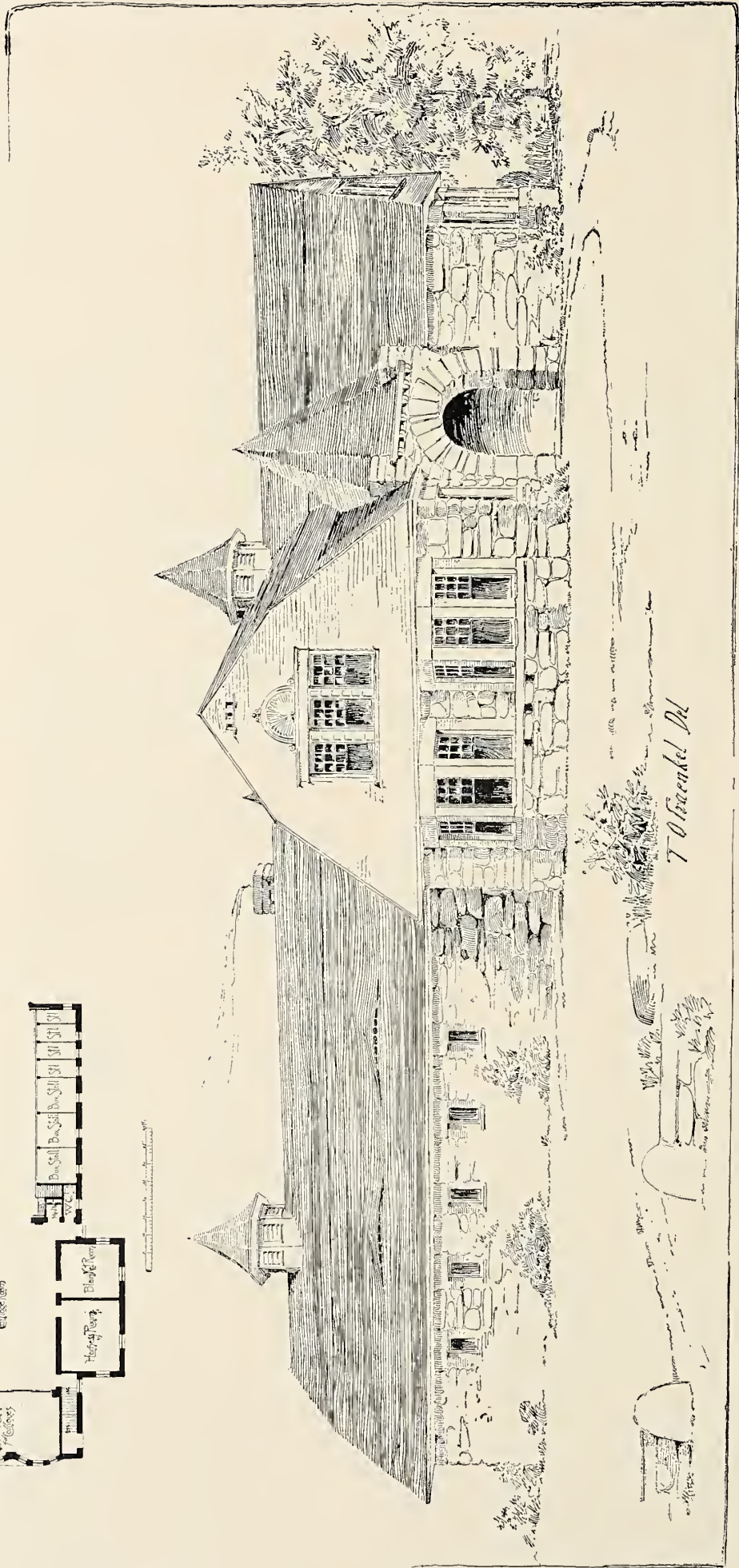


Frank L. Wright Del.

Residence for J. L. Cochrane Esq.
J. L. Silsbee Architect



Architectural Drawing of the Barn

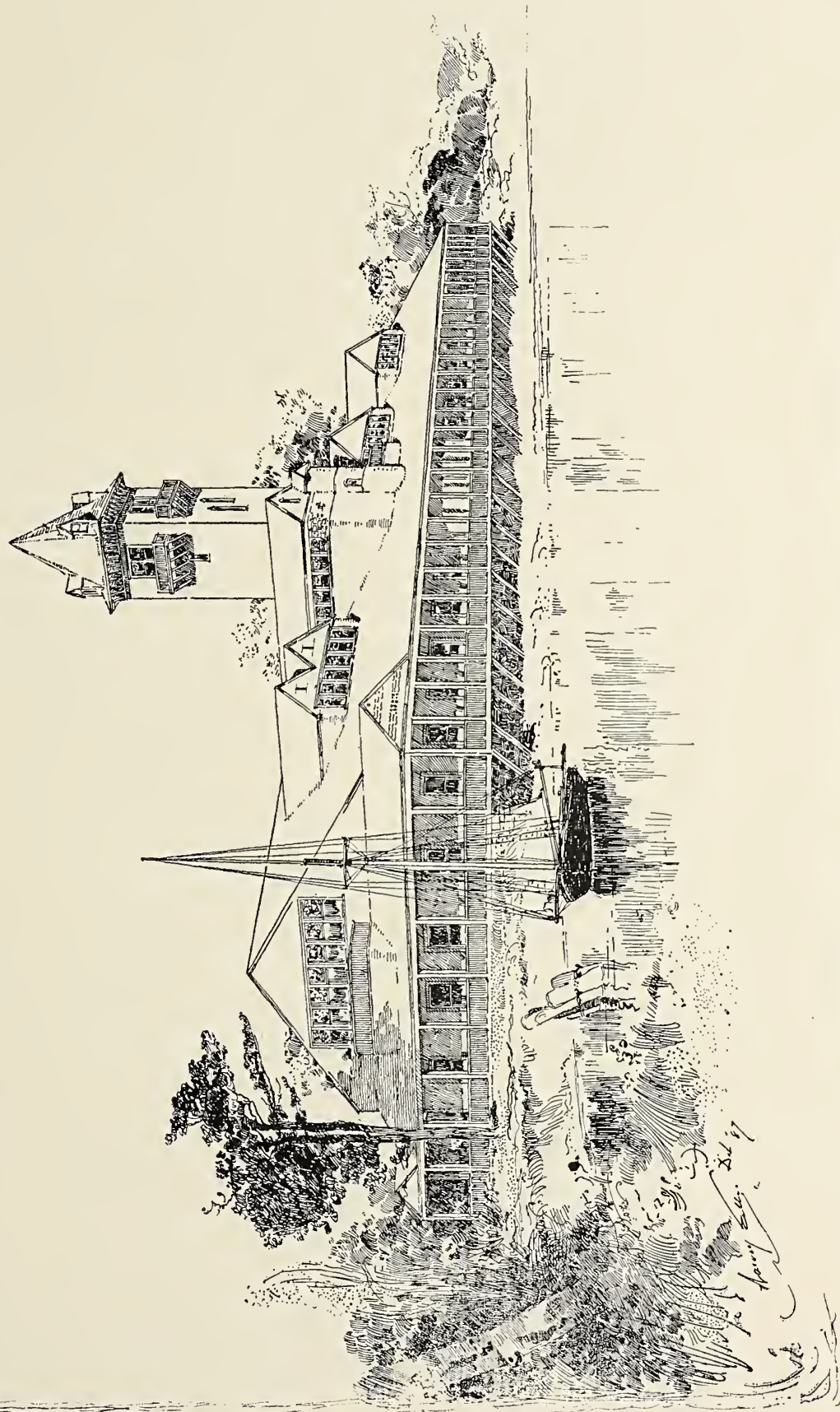


T. O. Brandel Del.

BARN FOR MR. CLEM. STUDEBAKER, SOUTH BEND, IND.

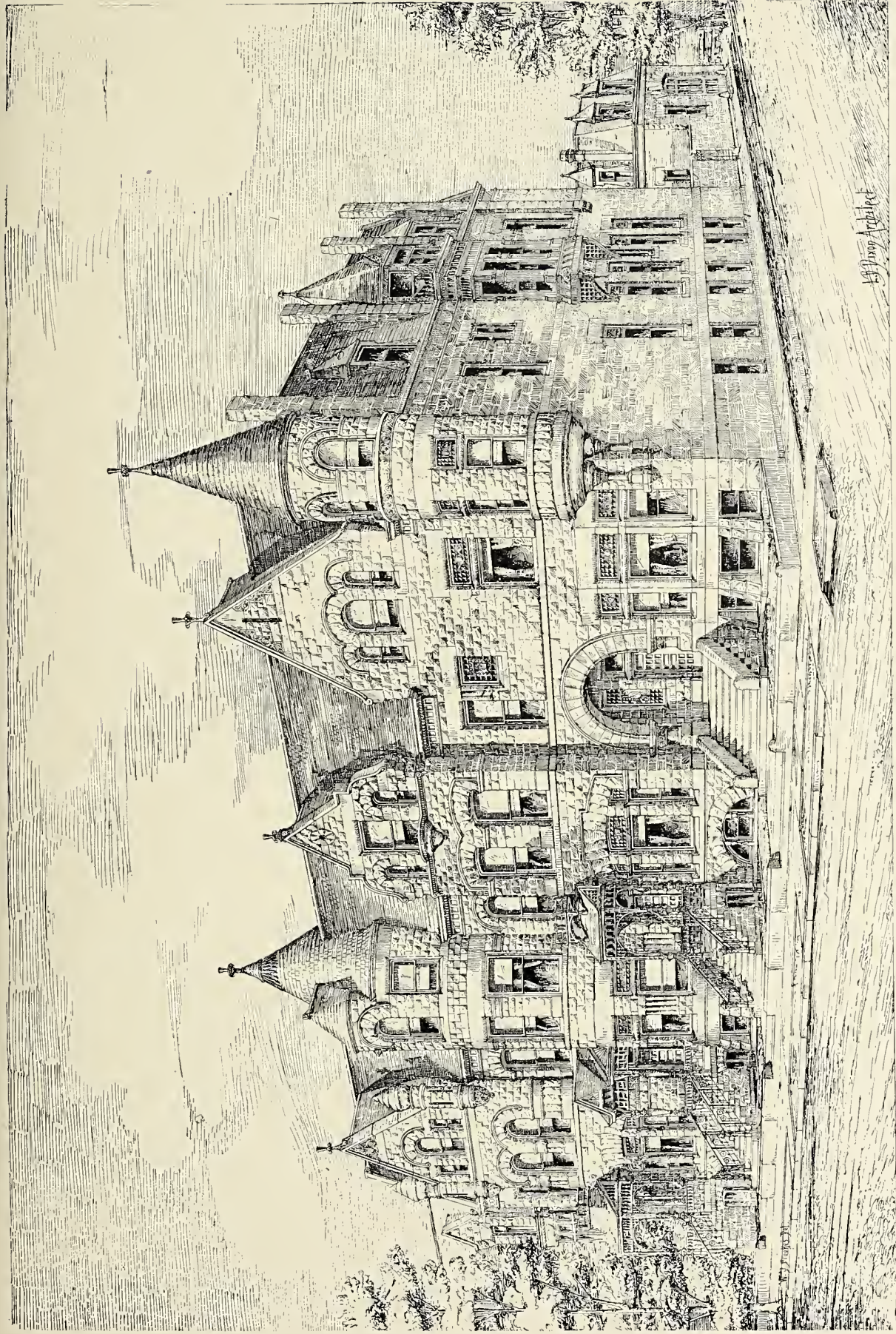
COBB & FROST, ARCHITECTS, CHICAGO.

L. S. BUFFINGTON ARCHITECT
MINNEAPOLIS MINN. 1887.



AMUSEMENT HALL AND PAVILION, LAKE MINNETONKA, MINN.

L. S. BUFFINGTON, ARCHITECT, MINNEAPOLIS, MINN.



W. P. Appleton

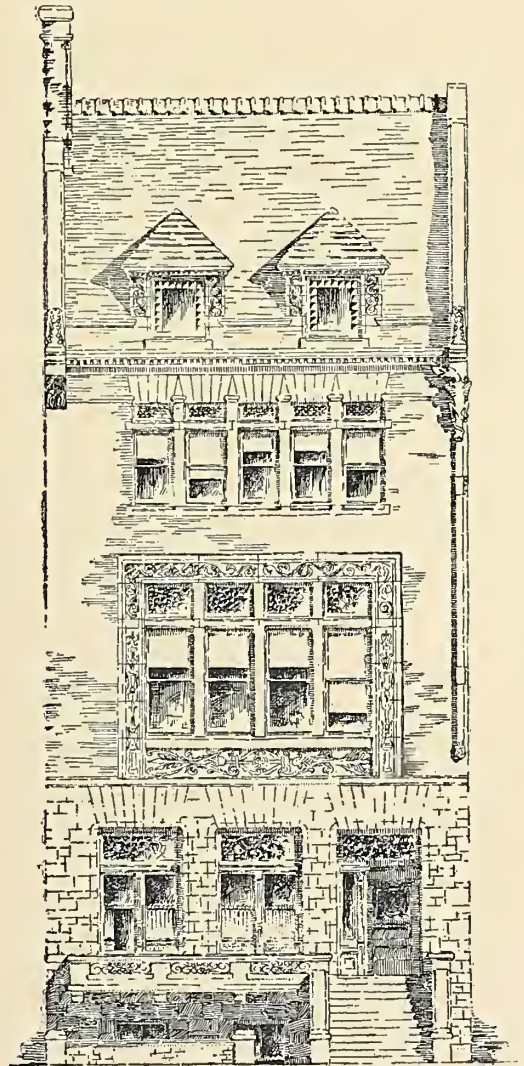
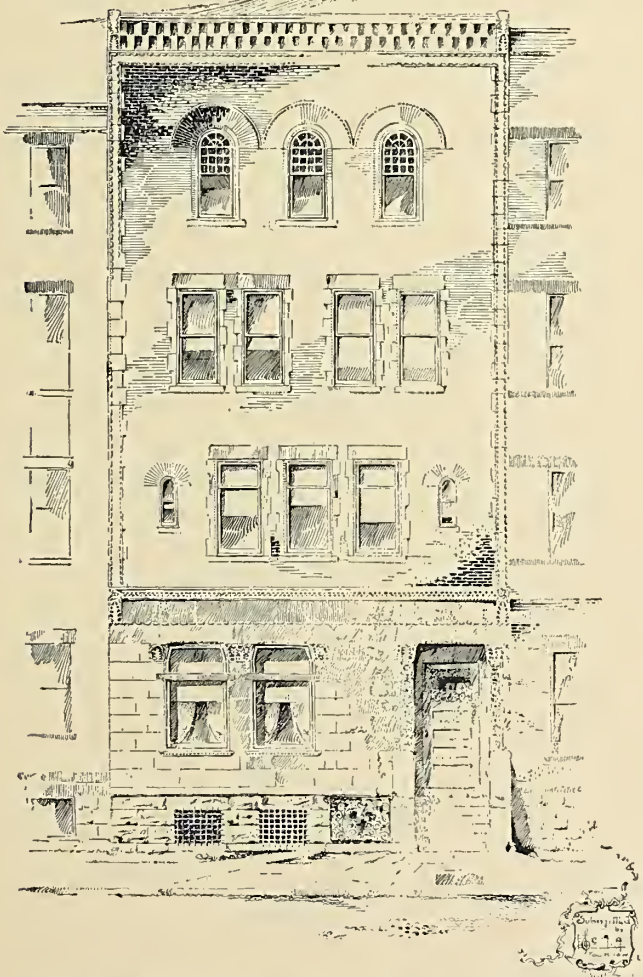
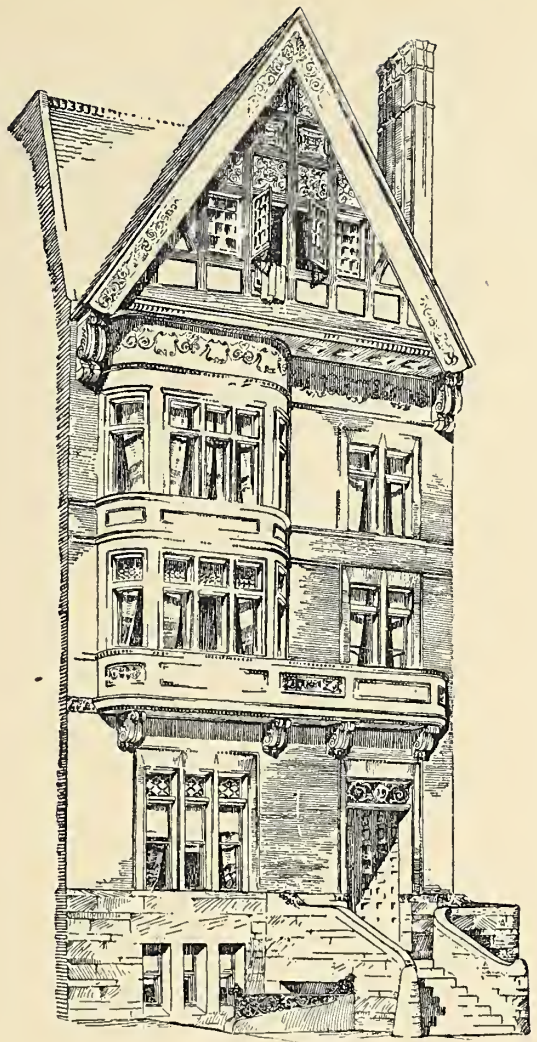
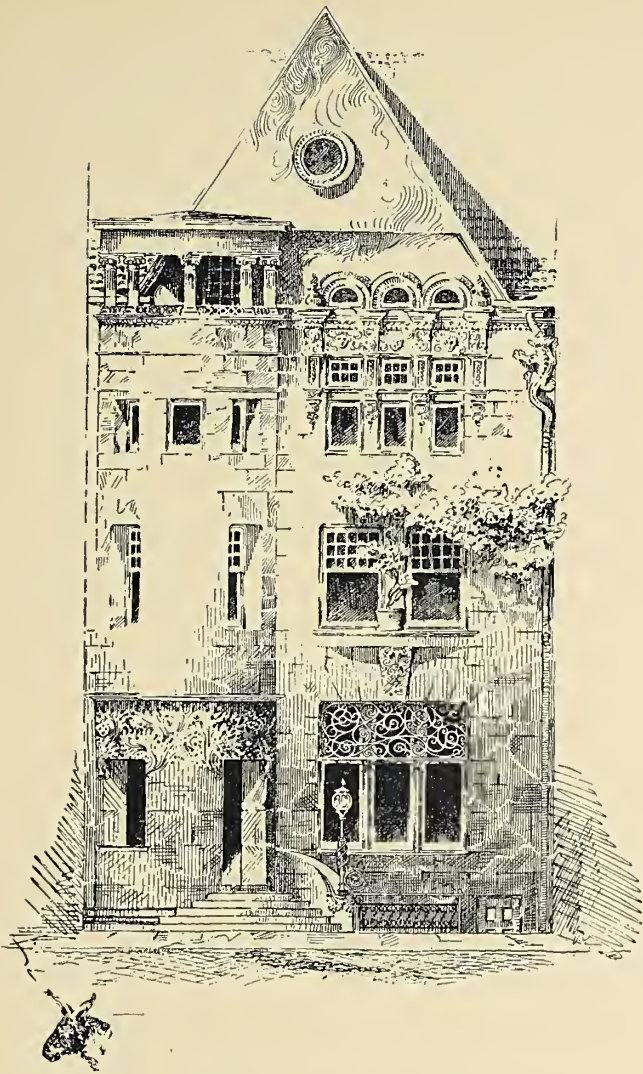
A BLOCK OF FOUR RESIDENCES, CHURCH ST. & 53RD ST.

— FOR JOSEPH BELFIELD ESQ. —



RESIDENCE FOR J. L. WOODWARD, CHICAGO.

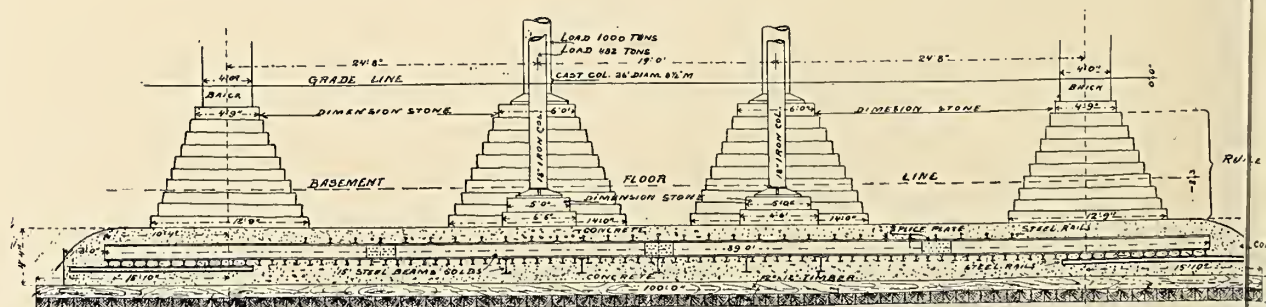
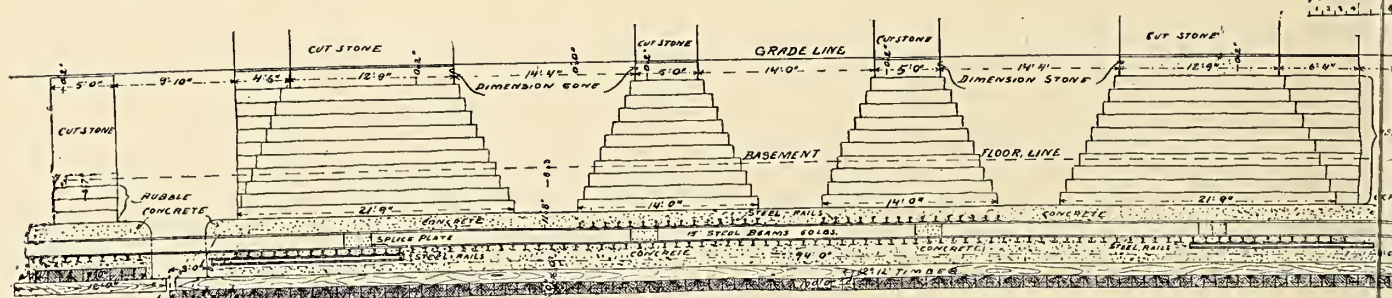
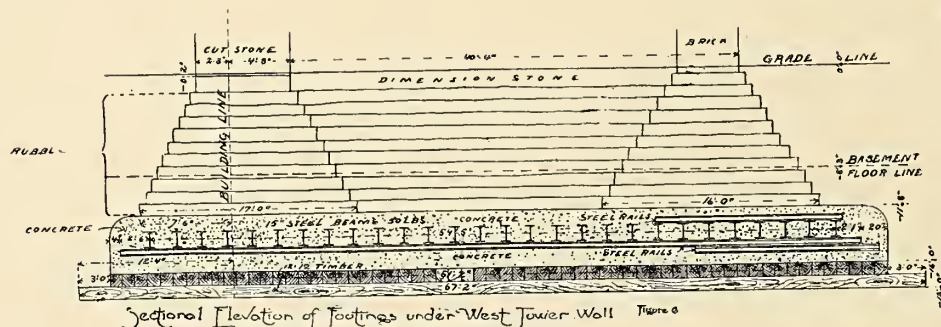
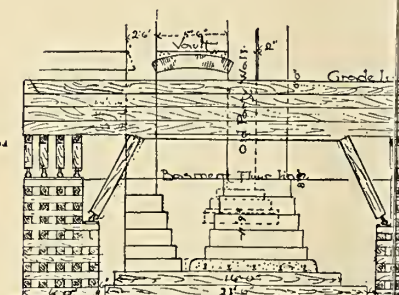
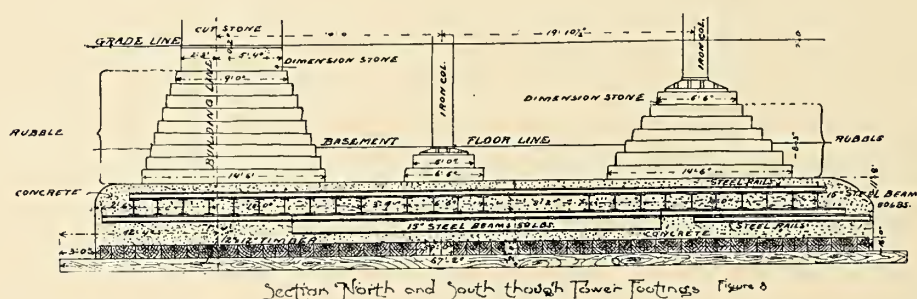
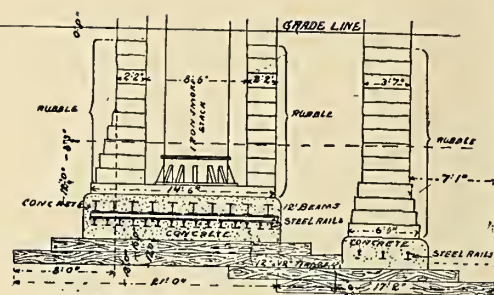
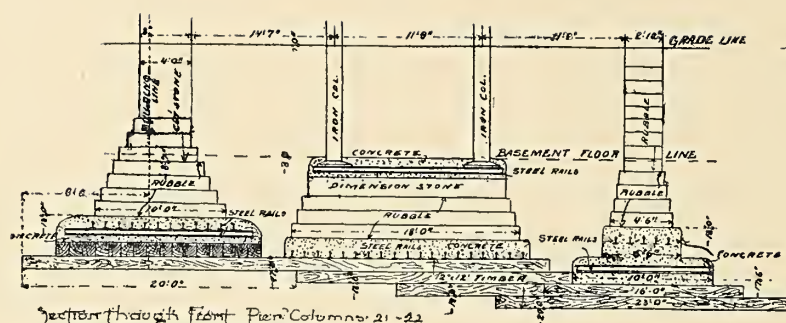
W. W. CLAY, Architect.

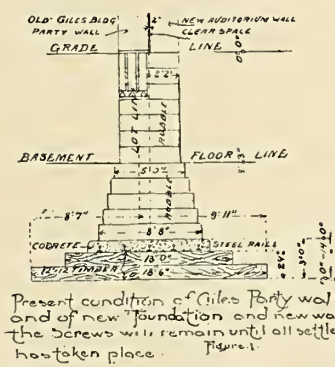
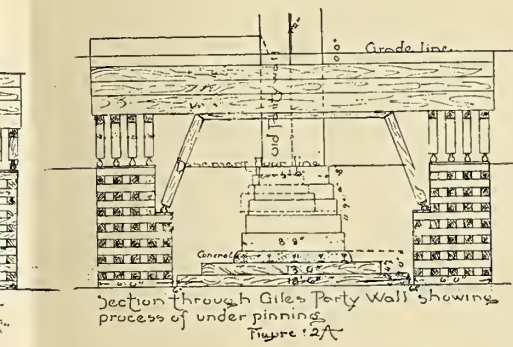
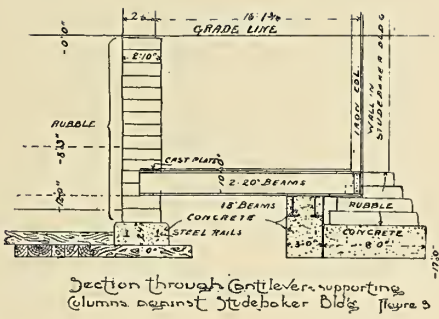
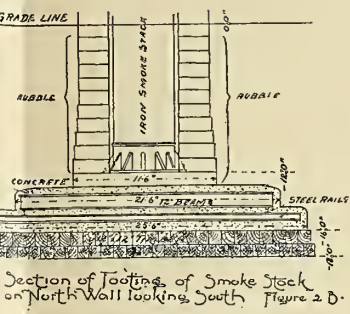


COMPETITION FOR CITY FRONT, BUFFALO ARCHITECTURAL SKETCH CLUB.

FIRST PLACE—F. R. FULLER.
THIRD PLACE—M. G. BEIERL.

SECOND PLACE—J. A. JOHNSON.
FOURTH PLACE—W. L. FUCHS.



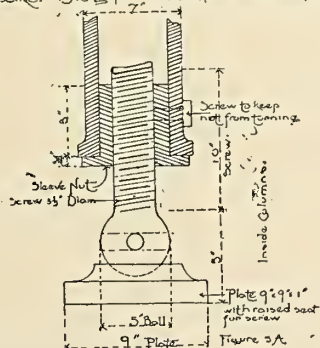
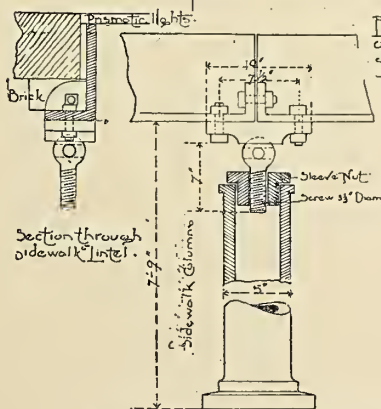
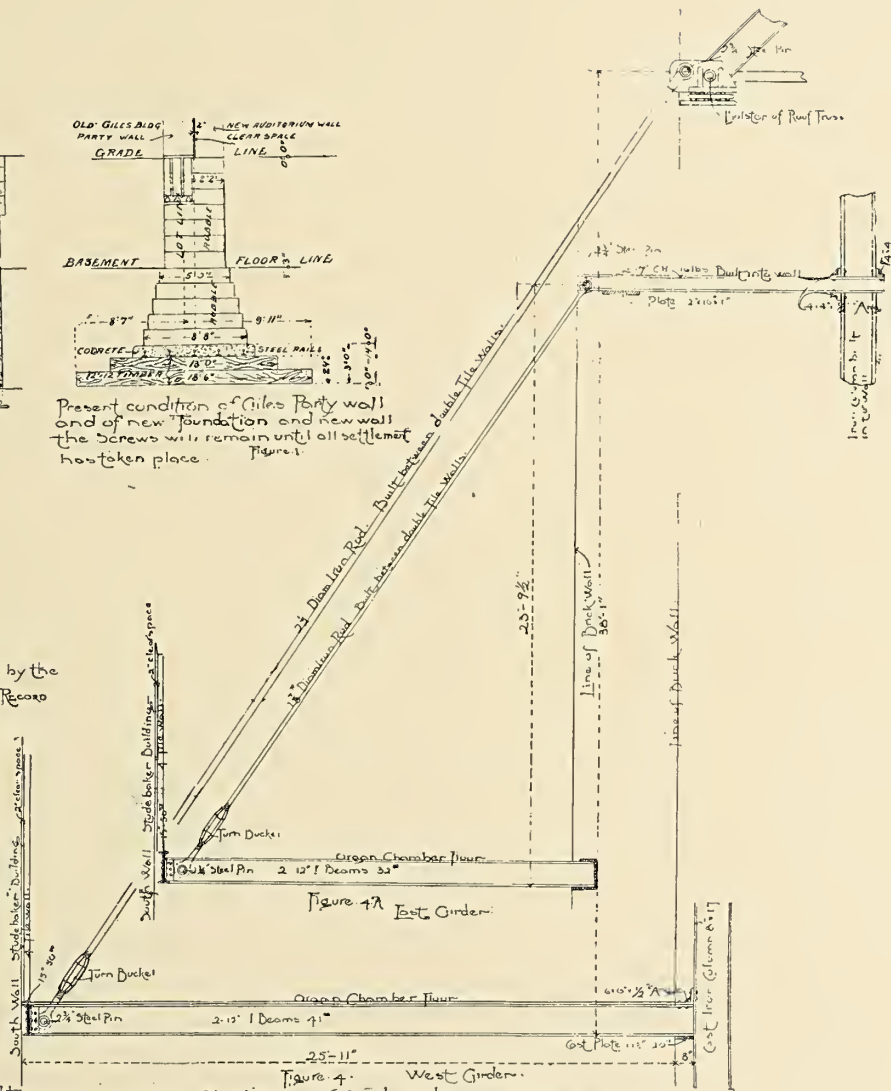
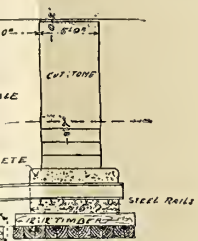


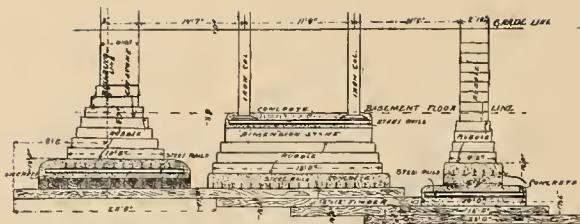
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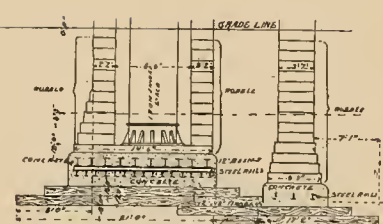
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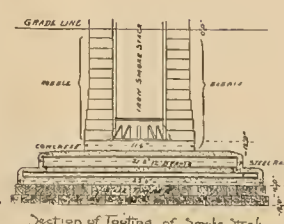




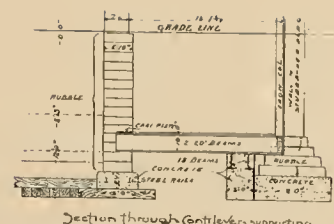
Section through front Pier Columns 21-22 and South Stage Wall. Figure 2.



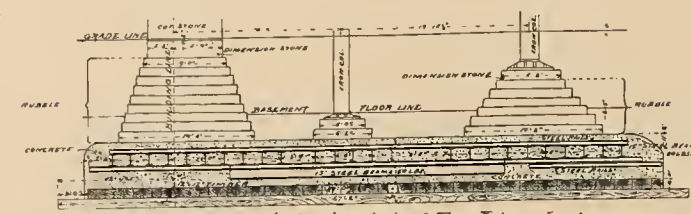
Section of Footing of Smoke Stack on North Wall and North Stage Wall looking East. Figure 2A.



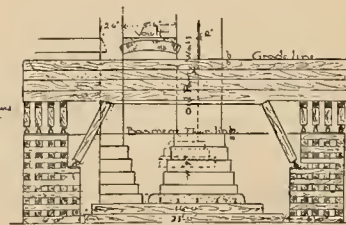
Section of Footing of Smoke Stack on North Wall looking South. Figure 2B.



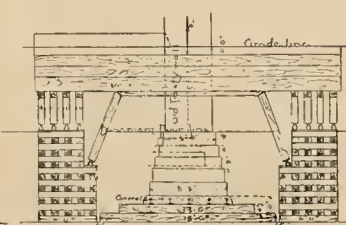
Section through Girders supporting Columns against Stage Wall. Figure 3.



Section North and South through Tower Footings. Figure 4.



Section through Giles Party Wall and new Foundation showing process of underpinning. Figure 2A.



Section through Giles Party Wall showing process of underpinning. Figure 2B.

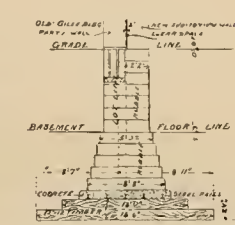
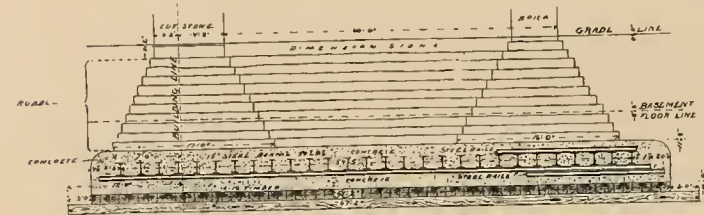
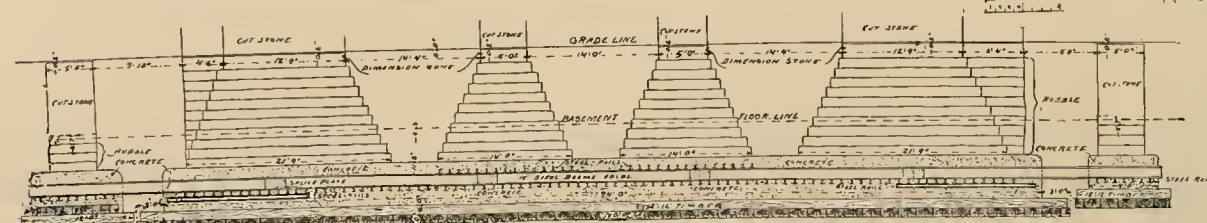


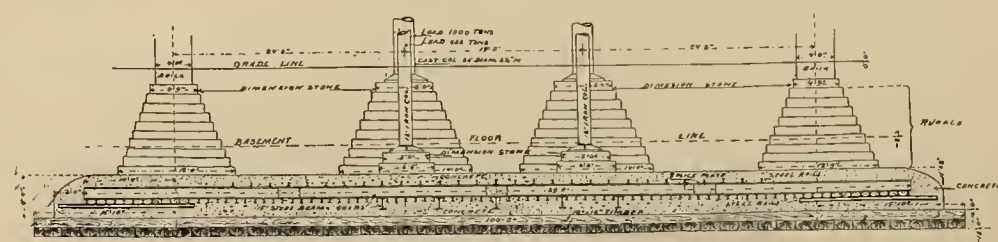
Diagram illustrating special expedients adopted in the Foundations of the Chicago Auditorium Building. Figure 1.



Sectional Elevation of Footings under West Tower Wall. Figure 5.



Front Elevation of Tower Footings showing connection to adjoining piers. Figure 7.



Section East and West through Tower Footings. Figure 9.

Diagrams illustrating special expedients adopted in the Foundations of the Chicago Auditorium Building

Adler & Sullivan Architects

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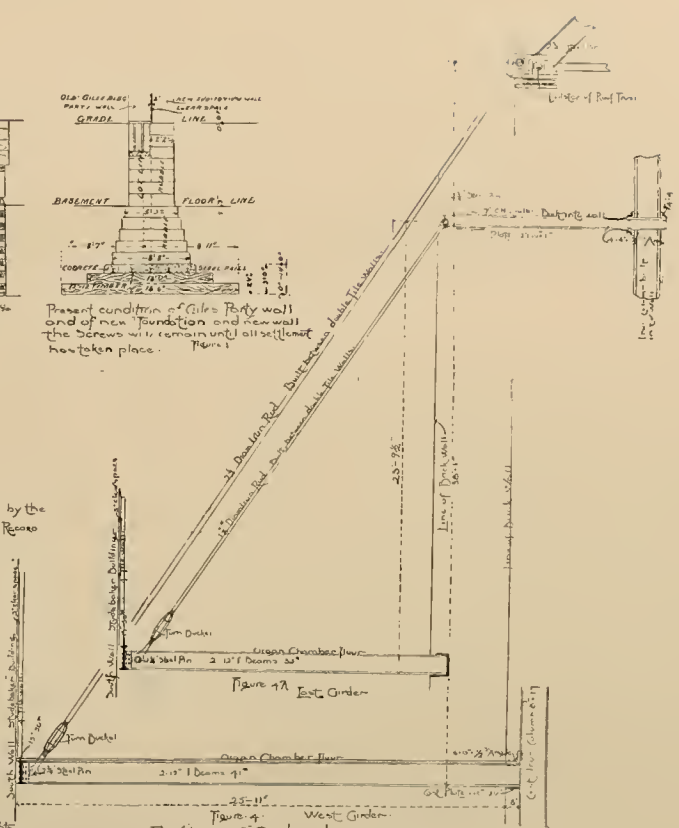
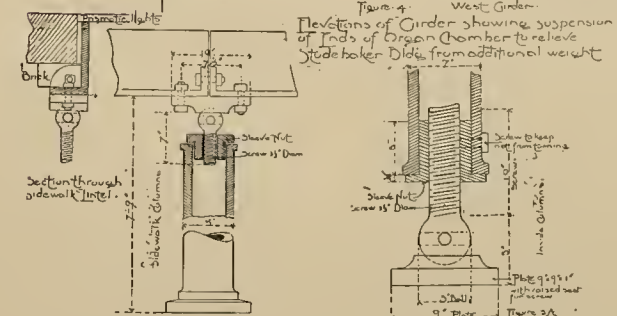


Diagram of Screw Adjustments of small iron fillers. Figure 8.



Elevations of Girders showing suspension of Ends of Organ Chamber to relieve Stage Wall. Figure 1A.

FOUNDATION CONSTRUCTION, AUDITORIUM BUILDING, CHICAGO.

ADLER & SULLIVAN, ARCHITECTS. (For description, see page 31.)

APRIL, 1888.

THE INLAND ARCHITECT
AND NEWS RECORD.

A Monthly Journal (with an Intermediate News Number) Devoted to
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Construction, Decoration and Furnishing
IN THE WEST.

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C. E. ILLSLEY, Associate Editor.

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Committee to Collect Legal Decisions Relating to Building Interests—Missouri: Chas. C. Helmers, Jr., St. Louis, chairman; Adriance Van Brunt, Kansas City; T. B. Annan, St. Louis. Kentucky: C. A. Curtin, Louisville; H. P. McDonald, Louisville; Mason Maury, Louisville. Tennessee: Wm. C. Smith, Nashville; Joseph F. Baumann, Knoxville; Chas. C. Burk, Memphis. Minnesota: F. G. Corser, Minneapolis; G. M. Goodwin, Minneapolis; D. W. Millard, St. Paul. Texas: S. A. J. Preston, Austin; James J. Kane, Fort Worth; N. J. Clayton, Galveston. Nebraska: G. L. Fisher, Omaha; Geo. W. Field, Omaha; Louis L. Mendelshon, Omaha. Michigan: John M. Donaldson, Detroit; Dillon P. Clark, West Bay City; Jack Rice, Detroit. Illinois: Fred Baumann, Chicago; R. C. Berlin, Chicago; Wm. Holabird, Chicago. Indiana: B. Vonnegut, Indianapolis; J. W. Reed, Evansville; J. F. Wing, Fort Wayne. Ohio: J. W. Yost, Columbus; E. O. Fallis, Toledo; S. E. Des Jardins, Cincinnati. Kansas: J. G. Haskell, Topeka; E. T. Carr, Leavenworth; A. W. Haywood, Wichita. Wisconsin: Geo. B. Ferry, Milwaukee; H. C. Class, Milwaukee; W. A. Holbrook, Milwaukee. Iowa: E. H. Taylor, Cedar Rapids; F. D. Hyde, Dubuque; E. S. Hammatt, Davenport. Georgia: F. C. Bruce, Atlanta; A. M. Macmurphy, Augusta; F. C. Morgan, Atlanta. New York: W. W. Carlin, Buffalo; Louise Bethune, Buffalo; J. G. Culler, Rochester. Dakota: Albert E. Cobby, Yankton. California: Eugene L. Calkins, Los Angeles. Louisiana: Thomas Sully, New Orleans. Wyoming: J. S. Mathews.

WE are requested to publish the following resolution for the information of members of the Illinois State Association of Architects:

Resolved, That it shall be considered unprofessional conduct for a member of this association to allow anyone in his employ to do work in his own name as an architect, and this shall be construed as meaning all architectural work done by employes, either during or outside office hours shall be done in the name of the firm, and the compensation for said work shall be paid to said architect or firm. If any member of the association shall violate the above resolution it shall be considered sufficient cause for his expulsion from the association. Any case occurring under this rule shall come before the Executive Committee, whose action shall be final as provided in cases of discipline.

The resolution was received and will be discussed at the next regular meeting, when every member of the association is particularly requested to be present.

WE devote the illustration pages in this edition entirely to the publishing of drawings submitted in competition for a soldiers' and sailors' monument for the State of Indiana. The accepted design has not been published, and we have secured this special privilege from the board of commissioners, and, by agreement, have copyrighted the design, so that it will still remain within their exclusive control. Although we do not feel that an apology is needed for this or anything else we may see fit to do, a few of the reasons why we have gone to the large amount of expense and labor involved to accomplish the publication and illustration of this competition in so complete a form may be given. In these days of irregular, unprofessional competitions, when even men of standing in their profession are too often found enrolled among those who submit plans in the ordinary county court house "lottery, with no premium" schemes, when letters regarding them are received daily from architects calling for their condemnation, we are desirous of showing that competitions if they must be at all can be managed with honor to all connected with them. Such an one this competition has been. Again, the best architects of the country were invited to compete, and the conditions being such as would insure them honorable treatment they complied. The illustrations given will, therefore, show what the best architectural talent in the United States can do in the year 1888 in the way of monument designing.

BRUNO SCHMITZ, architect, of Berlin, Prussia, was found to be the successful competitor, and it may be said that his design was the unanimous choice of the experts employed, and until after the final ballot was taken it was not even known that the design was from a foreign country. Percy G. Stone, architect, of London, England, was the unanimous choice for second place, and though the time was too short for the commission to be authorized by him to allow us to publish the drawing, it is in design well worth the place accorded it. Whatever may be the verdict of the architectural profession when they compare the drawings, it will be granted that Mr. Schmitz is a designer of great ability and well drilled in the alphabet of his profession. However, it may not be owing so much to this as to a greater familiarity with monument designing than the great architects of the United States that has led to his success. But in this we are not disposed to belittle in any way the honors he has so fairly won. He has conferred the greatest benefit possible upon the profession if a result is the awakening of a spirit of rivalry that will lead to further study, and if the building of this colossal monument will induce the same movement in other states under a similar form of competition.

IN no one branch of art or architecture are we so deficient as in that of great monuments. This may be that we, as a nation, are too young to feel the need of a stone-marked

sepulcher of buried hopes or buried glory. Living in the present, and looking to the future, we know no past, or if we do, it is only with the thought that the future will bring time for reflection, and in the future the monuments to our past will be built. Great architectural problems have arisen and American architects, with an adaptability that seems native, have met them. From them have evolved not so much a new style, but new methods, by which construction has become lighter, the space occupied more available for use, and such problems as that of the admission of light, the laying of isolated foundations and the erection of movable partitions. All of these are found in connection with the modern office building, of itself an innovation, and simply filling a demand with no precedent to follow, and no *motif* other than that of expediency to direct.

IN the United States the government competition is invariably of a character that architects of any professional standing can hardly enter with safety, and always with a surety of loss. For it is the best lobbyist who secures the prize in the end, and though he may have a good design and the ability to construct a creditable building, it is his influence as a politician, and not his ability as an architect, which wins. Under this condition of things the best architects do not compete, and those who have a professional name to make and a fortune to acquire, enter them only so far as they feel some hope of success, and leave them when other work brings more lucrative occupation. On the other hand, in Europe, especially in France and Germany, the conditions are vastly different. They have a past to commemorate and an accumulated wealth to invest, and the architect works for glory, being assured when he competes for a government structure that his chances are all based upon his ability to design.

WE do not despair of seeing a like and even better condition of things in this country. A few such successful competitions as this will have a vast influence. From the present crude conditions will arise government schools for theoretical teaching. State laws will be passed making examination and licensing obligatory, the national government will abolish the present system and adopt one by which the services of none but the best architects will be employed upon government work. A new generation will come with advanced ideas upon art, and while a new style will be a matter of formation for generations, and its perfection only to be found in the decadence of the nation, still each bright mind in the profession will seek to better that which exists, and while striving always toward utility, will violate no principle of architectural art.

CHICAGO has recently been the center of probably the last strike of any considerable proportions that will occur in this country for the next ten years. This strike was inaugurated by those members of the Brotherhood of Locomotive Engineers employed on the Chicago, Burlington and Quincy railway system, in conjunction with the firemen, and the fight being subsequently taken up by the switchmen on the other roads, for a short time it looked as though the roads throughout the entire West, if not the entire country, would become involved. The strike has again narrowed down to the road upon which it first started, and through the employment of other engineers and firemen business has been successfully resumed. The organization of railway engineers has for a number of years been considered the strongest as well as the most conservative labor organization in this country; but, to all appearances, this strike was ordered upon no more just

reason than that given by many of the most radical and ignorant bodies of employes on similar occasions.

THE defeat of this organization will have a strong influence in advancing the belief already shared by the majority of workmen, that a strike is simply a court of last resort, even then its wisdom being questionable. In fact, the feeling has become general that, to use a slang phrase, strikes are "a chestnut." This method of trying to right real or fancied wrongs has become "old" and worn out, and the agitator is fast finding himself without an occupation. The reason is not wholly found in the ill success which almost every strike has met with in the past three years. It is largely that the idea is imported from countries where the conditions are entirely different; where workmen, until recently, if not now, have been little more than serfs; where no man can rise above his class; where large estates must be kept up no matter what may be the state of trade, and the entire earnings of the workman goes back to his employer in payment of rent and the necessities of life; where the workman cannot purchase and own his home. These and other reasons have been fruitful of discontent to a greater or less extent in foreign countries. In America none of these conditions exist. The demand for skilled labor is such that good, industrious mechanics can always obtain work at good wages; the employe of today may be the employer of tomorrow, and it is only the improvident who cannot own their homes. Strikes, like epidemics, have raged in this country, but they are no longer to be the fashion. Workmen see that the loss to their employers is their loss, and it has been found that a damage to the employe is also a damage to the employer. Another reason we have for asserting that the day of great strikes is past is the general public sentiment, which demands their abolition, and in this country no evil can exist after it has become so generally harmful as to call down upon it real and unanimous public condemnation.

WHILE stone is commonly regarded as a type of imperishability, and in some localities stone monuments show distinctly the chisel marks made over a thousand years ago, it is well known that in other places serious dilapidations and disintegrations have appeared in stone after exposure to the elements for a comparatively brief period. The parliament houses in London, and the marble roof of Girard College in Philadelphia, are familiar examples. A recent article in the *Meteorological Zeitung* indicates that this deterioration has become more general and serious during the last fifty years than formerly. As might naturally be expected, it is most remarked in cities where the use of fuel generates sulphurous gases; and its ravages are especially destructive to statuary, bas reliefs and other external sculpture usually of marble, and which presents a large amount of exposed surface. The corrosive gases are absorbed by humid vapors in the atmosphere, which are then condensed on the sculpture so as to keep them almost constantly in a weak acid bath. Snow is even more harmful than rain. Being porous it is supposed to act like spongy platinum or charcoal in condensing and concentrating the acid vapors, while it prevents their speedy evaporation. Specimens of freshly-fallen snow gathered simultaneously at Munich and at a suburban village showed an equal trace of sulphuric acid in each; but specimens of the same snow gathered two weeks later showed that the proportion of acid in the city snow had increased nearly eight-fold, while in the other it was unchanged. As wood is largely used for fuel in Munich, *La Semaine des Constructeurs* remarks that analyses in coal burning cities might be expected to yield much more marked results.

Photography in Architecture.*

PART VI.—BY FRED D. FOSS.

THE formula given in the last paper for the ferrous-oxalate developer is the standard formula of photographers when the oxalate developer was in universal use; but this developing medium has been succeeded by the (commonly called) pyro-soda developer, which is more energetic in its action upon the latent image, and allows a greater latitude in the exposure. The pyro-soda developer, in its latest form, is probably one of the best developing mediums yet discovered, excepting, perhaps, the lately-known hydrochinon, of which but little is known at the present time; but the results of the experiments that have been made lead to the belief that it will be the developer of the future. The experiments with hydrochinon have been necessarily limited, and confined to the hands of but few people who take an interest in such matters, and are willing to devote time and means to the advancement of photo-chemical research. Photographers, as a rule—and there is scarcely an exception—do not take kindly to anything new, and are not willing to experiment for the good of themselves or others, preferring to have others do the preliminary work, and then, if a success is achieved, they are willing to, perhaps, adopt “something new;” but they (the photographers) are hard to drive out of the beaten track of old fogysm (?), claiming “the developer we are now using is good enough for anyone’s use.” Perhaps it is; perhaps it is good enough for their purpose at the present time; but the day is not far distant when even the ordinary—very ordinary—tintype artist will strive to do better work. It is a remarkable fact, but nevertheless true, that the great majority of good devices and formulas now in use by the profession have been discovered and devised by the amateur. The above remarks may seem superfluous to a casual reader; but believing these articles may be read by some who are interested in photography for photography’s sake, they have been used as an interlude to relieve my mind of a little soreness caused by an article in an eastern journal attacking the amateurs and amateur work.

There is a great field for the man or woman who undertakes the study of photography and photographic chemistry, not for the sake of its power of reproducing the beauties of nature, or animated subjects only, but for the knowledge and artistic experience gained; and one important discovery will repay the study of a lifetime, beside the personal satisfaction it gives to the discoverer. Having relieved my mind, to a certain extent, I will now continue with the method of using the oxalate developer. After having made an exposure go into the darkroom—being careful to close the door and observe that all white light is excluded—and mix the developer according to the rule given in the last paper. If, after a minute, no sign of an image makes its appearance, conclude that you have under-exposed the plate, and add about two drams more of the iron solution. Do not get impatient, but give the developer time to act. The addition of the last portion of the iron solution should cause—unless you have very much under-exposed—a slight blackening of the plate on the spots where the light has acted the strongest, i. e., the high lights, and a gradual changing of the entire plate. If this change is gradual and harmonious, do not add any more of the iron solution, but allow the developer to act until the image appears veiled—sunken in—and the reverse or glass side of the negative plainly shows the picture. The negative is then thoroughly washed under the hydrant, allowing the water to flow over it easily, and not with the full strength of the pressure, to remove all the developer that may be in the film, and is then placed in the fixing bath, which consists of:

Hyposulphite of soda..... 1 ounce.
Water..... 4 “
(Any quantity can be made by observing the proportions.)

where it is left until all the whiteness of the negative has disappeared. After the total disappearance of this whiteness, allow the negative to remain in the fixing bath a few minutes longer in order to remove any invisible spots that may be lurking around to do future mischief. Next remove the plate from the fixing bath and place it under the hydrant to wash. This washing must be very thoroughly done, as it is quite difficult to remove the hypo from the gelatine film, and if it is not done the negative will fade and a minute crystallization form that will utterly ruin it. One thing should be borne in mind by all who contemplate making their solutions, and that is: any quantity of any solution can be made by observing the proportion of the same and by observing carefully the following tables; a mistake is impossible:

APOTHECARIES' WEIGHT.			
20 grains.....	1 scruple.....	20 grains.	
3 scruples.....	1 dram.....	60 “	
8 drams.....	1 ounce.....	480 “	
12 ounces.....	1 pound.....	5,760	
FLUID.			
60 minims.....	1 fluid dram.....	60 minims.	
8 drams.....	1 ounce.....	64 “	
20 ounces.....	1 pint.....	1,280 “	
8 pints.....	1 gallon.....	10,240 “	

The above weights are those usually adopted in formulas. All chemicals are usually sold by

AVOIRDUPOIS WEIGHT.			
27 11-32 grains.....	1 dram.....	27 11-32 grains.	
16 drams.....	1 ounce.....	437½ “	
16 ounces.....	1 pound.....	7,000 “	

NOTE.—An ounce of metallic silver contains 480 grains, but an ounce of nitrate of silver contains only 437½ grains.

(To be continued.)

Slate.*

BY W. B. LORD, CHICAGO.

THE early history of slate is obscure. I have been able to trace its use only to the thirteenth century, when the quarries of North Wales furnished slate for the roofs of the old historic castles of Conway and Caernarvon, which were erected about 1300 A. D.

The production of a good slate is limited in the British Islands—elsewhere than in Wales—although some quarries in central England and a few localities in Scotland have been worked for many years, but it is rough and heavy, and the amount quarried is limited.

The quarries of Killaloe, in Tipperary, Ireland, are of considerable importance, producing a good quality, but somewhat rough. The possibility of an increased production from these quarries both in quantity and quality is encouraging, for the reason that they are in the proper formation, and with more quarrying promise to produce a slate equal to the Welsh, and thereby relieve the demand, which is greater than can be supplied. In time the Welsh quarries will be about exhausted, and those of Ireland will be called upon to contribute their share of the demand.

Enterprising Americans with an eye to business are taking advantage of the gradual failure of the Welsh quarries, the present obstacles which are retarding the development of those of Ireland, and also of the fact that although it is quarried at many points on the continent—only the local trade can be supplied—are shipping large quantities to foreign countries.

At the end of the twelfth century slate was used in the construction of the castle of Angers, France, from the extensive quarries which are located at that point, this being the oldest quarry and about the first in use on the continent.

The principal slate-producing regions of the United States are Rutland county, Vermont; Washington county, New York; Lehigh, Northampton and York counties, Pennsylvania; New Canton, Virginia; Monson, Maine; and Baraga county, Michigan. Workable deposits are known in other localities, but at present they are inaccessible.

The first quarry in Rutland county, Vermont, was opened about the year 1840, and in Washington county, New York, about 1850. In these two localities are found our red, green and purple slates. The remainder of the localities produce the black and the blue-black. Slate from Lehigh and Northampton counties, Pennsylvania, is known to the trade respectively as the Lehigh and the Bangor. The Lehigh slate is quarried at and in the vicinity of Slatington. Bangor, Pen Argyll and Chapman’s produce the bulk of the Bangor slate.

A preference is shown (I suppose on account of price) for the Bangor, and more No. 1, as they call it, is specified than can be supplied for roofing. Through inattention and inability to distinguish the difference, a great deal more of No. 1 Bangor is paid for by the consumer than is used.

The York county, Pennsylvania, quarries produce what is commonly called “The Peach Bottom” slate. They were opened about eighty years ago, which may be stated as about the date of the commencement of the slate industries of the United States. This being undoubtedly the best slate in this country and the demand for it so great, the production is now limited and but little on the market, as the quarries are too deep to profitably work. Near New Canton, Virginia, lies comparatively inexhaustible deposits of most excellent slate, which is fully the equal of the “Peach Bottom.” The quarries have been extensively worked for years, and are equipped with all necessary machinery, planers, saws, rubbing beds, etc. The toughness of this slate makes it more expensive to work than the softer varieties, but the extra quality of both roofing and slab slate produced by this quarry will more than repay the small extra cost.

Slate is one of the few mineral products of nature which is particularly adapted by its peculiar formation to a great variety of uses. Its mining and manufacture as an industry of the future is full of bright promise, as its merits become more widely known and appreciated, and the right business tact followed in its introduction.

Slate quarries in well selected localities, conducted by men with adequate capital, and practical knowledge enough to conduct both quarrying and selling, with judgment, is a profitable enterprise. There are different varieties of slate which derive their names from the distinguishing mineral constituent, but none of them have the commercial value of clay slate. They are classified: micaceous, talcose, chlorite and clay slates. The micaceous are blue and gray in color, speckled with minute particles of mica. Its more compact varieties are used for curbing and flagging. The talcose contains a large percentage of the mineral talc (commonly called soapstone), and is used for scythe and hone stones, its color being greenish and having a greasy feel. The chlorite is a brighter green than the talcose, not so greasy feel, and is generally very hard and strong. The true clay slate or slate of commerce is closely allied to other varieties; sometimes the finer passes into chlorite schists, like the green slates, while the coarser passes into sandstone by an increase of quartz and loss of alumina. The pure argillaceous (clay) slates are sometimes converted into hornblende schists. A schist means a redistributed, finer assortment of particles.

In the selection of slate as well as building stones, care and judgment must be exercised, as a vast quantity of worthless material is on the market. True slate or slate of commerce may be defined as a fine grained, compact and exceedingly fissile (readily split) mineral, varying in color from black

* Continued from Vol. XI, No. 3, page 31.

* Paper read before the Chicago Architectural Sketch Club, February 13, 1888.

to dark blue, purple, shades of green, gray and brick red. It has the property of being hard without being brittle, and capable of resisting a pressure of about 20,000 pounds to one cubic inch without crushing, or it may be soft and tough. When free from impurities, it is a non-absorbent of water, and does not disintegrate in the air. It is capable of sustaining a high degree of heat without fusing or cracking and can be readily carved or turned. It is easily worked and takes a smooth finish. By the marbling process it is coated in an unlimited variety of colors, imitating marble for mantel work; and hardwood for matching trimmings, decorations, etc., for interior woodwork. The different colors of slate are chiefly due to the various proportions of the compounds of iron in its composition. It is present in ordinary blue slate as protoxide of iron, an excess or lack of which and the absence of peroxide of iron, is the cause of the many different shades of blue. If the slate be of good quality and ring, and the color rich deep blue or black, and of uniform shade, it will not fade and is durable. In the green slates the proportion of protoxide of iron is one-third less than the blue. Traces of phosphoric acid and magnesia in combination with the oxides of iron, produce the green shades. The unfading green has a larger proportion of the peroxide of iron and calcium carbonate, and less of magnesia than the sea-green, and therefore, is a less prominent and more durable color. The sea-green slate makes a good roof, as the quality is generally good, but the color will fade in time to a greyish shade. The purple cannot be relied on for color. The only red slate in the world which has been found practicable to quarry is found in Washington county, New York—although veins have been found in other states. It commands a good price on account of its scarcity, as the veins are thin, few in number, and soon exhausted. There are several shades of red, varying from a dark red to a light pink. The dark and medium color is the most reliable for both color and strength. The pink is apt to be brittle and to fade.

The soft, black slates contain considerable carbonaceous matter and disseminated sulphide of iron in a decomposed state, which will develop into a white efflorescence, and ruin a roof after a short exposure to the elements. For roofing purposes, a careful selection for even color and metallic ring must be made, if a durable job is desired. From the softer deposits of this slate are manufactured our school slates and pencils. The variegated slates are derived from deposits in layers and irregular masses, tinged with differently colored pigments, and afterward changed into slate by natural processes.

Analyses show that the bulk of slate deposits are composed of silica and alumina, and were at one time ordinary clay. Slate does not possess the numberless varieties of color, nor the susceptibility of polish which marble assumes, and therefore on the strength of appearance alone, irrespective of adaptability, marble is very often used, especially for plumber's work, where the use of slate would prove more sensible and lasting, because of its strength, imperviousness to water and fluids generally, and consequent cleanliness. The most important of the properties of slate, and that which gives it its value as a roofing material, is its remarkable cleavage structure, which may be defined as easily splitting, when fresh quarried, in planes parallel to each other. In no product of nature, except mica, is it developed to such a degree, and taken advantage of, as in the manufacture of roofing slates.

Slate is quarried by drilling holes and blasting, taking all possible advantage of slips, joints and floors, or, I might say, natural seams and peculiarity of formation, to displace it without unnecessary breakage, and as the planes of cleavage lie at an angle of from 45° to 60° it cannot be quarried like stone, on a horizontal line, but necessitates considerable judgment and ingenuity to economically loosen the blocks from the bed.

The blocks are then hoisted to the surface by the derricks, put on a truck and run to the slate makers' shanty. The blocks as they come out are very irregular, so one of the splitters' assistants breaks them into sizes suitable for splitting into slates; in length and breadth sufficient for handling, and about two inches in thickness. These blocks are placed in piles on the left hand of the splitter, who is seated on a bench raised a little from the floor. The splitter then takes a block between his knees, and with a wooden mallet, and a broad thin chisel, splits it through the middle, and continues dividing the blocks into equal halves, until they are reduced to the thinness of roofing slate. These thin pieces of slate of irregular sizes are then taken by an assistant and economically cut in a dressing machine to the various sizes in use. The dressing machine is an arrangement of knives which cut the slate somewhat similar to a pair of scissors. In the manufacture, it is put through the various processes without unnecessary delay, because it is more readily worked before the quarry water dries out. In fact, it about loses the property of splitting when free from sap, and this is taken advantage of by using it for building work, such as sills, posts and slabs. Where a flight of iron stairs is desired, no better material for the treads can be found than a good quality of slate, because it will give a firm hold for the foot, and not wear out. A flight of stairs with a slate tread in an exposed and wet situation, if the tread has enough incline to allow the water to run off, will not become slippery, because the slate does not absorb the water. The trimmer or dresser, as the man is called who cuts the slate to size, sorts the slate as he makes them into first and second qualities, and also arranges each size together, ready to be carried and placed on the pile in the yard. Three grades of slate are made, to wit: No. 1, No. 2, and ribbon. No. 1 consists only of what is smooth in texture, uniform in color, straight in grain and free from knots. What lacks these qualities, and are not ribbon, are called No. 2.

A band, from the breadth of a line to an inch or more, is sometimes noticed in a slate. Such slates are called ribbon, and are of little value, because of a difference between the quality of the ribbon and the two sides of it. Considerable skill, judgment and honesty is required in placing slate upon a roof. The slate should be selected, rejecting all seconds and ribbon, and should be laid with the regular required lap for the various sizes, using a sufficient quantity of slating nails to firmly attach them to the roof. If good work is desired, proper results with less inconvenience will be arrived at, if the architect exercises care in his

specifications, and demands that they are adhered to, in addition to requiring a time warrant on the work, as is the custom.

For cheap roofing, slats are nailed to the rafters, from two inches to four inches apart, and the slate is laid on these slats. The usual way is to board the rafters, nailing the boards tight, with a space of about one inch between each board, to obviate as far as possible the shrinking and swelling, which loosens the nails and breaks the slate. Then lay the roofing felt over the boards and lay the slate on the felt. If an extra job is required, bed them in cement.

A slate roof is laid by first placing a course on the eaves. All courses above this one must be laid with a lap of more than one-half the length of the slate shingle, or the vertical joints, which are not close, will not be covered. The lap of the slate is more than one-half of its length, so the more lap a course is laid with, the better will be the roof. Manufacturers allow three inches when selling a square of slate, and architects should see that the roof is laid with that amount of lap, as a less one is a considerable gain for the dishonest roofer, which he takes advantage of. A square of slate covers ten square feet, and weighs about six hundred pounds.

Although the original cost of a slate roof will be more than that of other materials in use—if proper care is exercised in selection of material, and honest work is done, it is the cheapest in the long run. Where practical, the larger sized slate should be used, for the reason that only the best rock can be split in the large sizes, and you will be sure of getting good slate. Another advantage in a large slate is that they cost less, as the labor in making them is less, and also the cost of putting them on the roof. For making tiles, slabs, etc., the blocks of slate are first split to about the proper thickness. They are then sawed by band saws, the same as are used in sawing stone, to required sizes and put on a planing machine which is similar to those used in planing iron and stone, except that the cutter is broader. This machine shaves the slate to proper thickness, giving the surface a smooth, level face. The plates of slate are then put on a rubbing bed and rubbed to the required finish.

The rubbing table is a round, flat piece of cast iron, from six to ten feet in diameter, revolving horizontally. The block to be rubbed is placed on the top of this revolving plate, and held in position. Sand is put on this plate, and water run onto it, and the blocks ground to a smooth surface.

In this paper I have collected all available information on the history of slate, localities where found and quarried, its various colors, uses, and methods of quarrying and manufacture, and trust the information will lead to the use of good material, the slight excess in cost of which will amply repay the consumer.

Texas State Association of Architects.

THE third annual meeting of the Texas State Association was held at Houston January 17 and 18.

The convention was called to order by President J. J. Kane, of Fort Worth, who made an able and lengthy address.

Calling attention to the urgent necessity for a renewed effort in the direction of securing the passage of a law governing the practice of architecture in the state, the president said:

This bill, gentlemen, is a matter of very great importance for the future welfare and standing of the practice of our profession in the state; and it is to be hoped that earnest and vigorous action will be taken by this convention that will not fail to keep this subject alive and before our representatives to enable us at the earliest day to obtain the passage of a bill by the legislature of Texas that will place our profession in the position it rightfully and properly belongs, to enable us to protect our own professional practice and prevent unprofessional practice in our state. The importance of giving this subject our best attention cannot be overestimated in consideration of the future welfare of the practice of architecture in our state.

Mr. Kane spoke strongly in favor of a high standard of character and practice among members of the association, preferring that the number of members should be few rather than admit those unprofessional in their practice or untrained in the profession of architecture. Mr. Kane made an extensive review of American architecture from the buildings erected in New England, Virginia and St. Augustine in early days down to those of the present, showing the speaker to be not only a man of wide observation but with a clear judgment and possessed of a trained knowledge of architecture. Bringing his argument down to the formation of the American Institute of Architects in 1867, and the Western Association of Architects in 1884, Mr. Kane concluded as follows:

Like the American Institute with its chapters, it soon became evident that state associations must be formed under the same rules and laws as the Western Association, for the purpose of uniting all architects of good standing in the various states in a bond of fellowship, that the practice of all who belonged to the various state associations would practice under a uniform code, same as the Western Association of Architects, and to produce a fraternal feeling of friendship amongst all those who are engaged in the professional practice of architecture. Hence, gentlemen, the organization of the Texas State Association of Architects. May it ever be in the future as it has been in the past two years of its existence—a bond uniting its members in a feeling of fraternal friendship. To you, gentlemen, who represent the association in its youth and infancy, will the honor be due of placing it on a high and honorable plane with its sister state associations by making and enforcing just and honorable rules for the guidance and practice of its members, and to be ever ready to exert our best efforts to elevate the profession to which we belong.

At the conclusion of the president's address, on motion of W. C. Dodson, seconded by Eugene T. Heiner, the thanks of the association were tendered Mr. Kane for his able address, and it was ordered spread upon the minutes and printed.

The secretary, S. A. J. Preston, being in California, W. W. Larmour, of Waco, was appointed secretary *pro tem*.

The executive committee reported the following architects as members of the association:

A. B. Bristol, Cortez Clark, Guy M. Tozer, Albert Ullrich, George W. Stewart, Dallas; A. C. Watson, Austin, and George E. Dickey, Houston.

The report of the treasurer, W. W. Larmour, was read and referred to the auditing committee, who subsequently reported it correct.

The following resolution was presented by E. T. Heiner:

Resolved, That the schedule of charges be so changed that hereafter they shall be as follows: For full professional services (including supervision) five per cent upon the cost of the work, except as for such work as hereinafter otherwise mentioned. For dwellings or resident buildings or all work costing less than \$5,000, 7 per cent, divided

as follows: For preliminary studies, 1½ per cent; for preliminary studies, general drawings, specifications, 4 per cent; for preliminary studies, general drawings, specifications and detail drawings, 5 per cent.

The resolution was discussed by architects N. Tobey, E. T. Heiner, W. H. Tyndall, W. W. Larmour, Sam P. Herbert, W. C. Dodson and A. C. Watson.

On motion of W. C. Dodson, the resolution was referred to the executive committee for their consideration, with instructions to report the same back to the convention with such recommendations or alterations or additions as they might deem proper before the final adjournment of the convention.

The convention adjourned to meet the following day at 9:30 A. M.

The convention was again called to order by President Kane, and listened to an interesting paper by N. Tobey on professional practice.

A resolution was presented by E. T. Heiner providing for the appointment of a committee to memorialize the legislature to secure the passage of an act to regulate the practice of architects in the state of Texas.

The resolution was adopted, and a bill was prepared similar to that formulated for the same purpose by the Western Association of Architects.

The following officers were elected for the ensuing year: President, W. C. Dodson, of Waco; first vice-president, James Warrenberger, of San Antonio; second vice-president, Cortez Clark, of Dallas; secretary, W. W. Larmour, of Waco; treasurer, Eugene T. Heiner, of Houston; executive committee, J. J. Kane, of Fort Worth, chairman; N. Tobey, of Dallas; A. O. Watson, of Austin; W. H. Tyndall, Galveston; S. P. Herbert, Waco.

The convention adjourned to meet at Waco the second Tuesday in January, 1889.

Association of Tennessee Architects.

THE Association of Tennessee Architects held its second annual meeting at Nashville on March 20, in the rooms of the Builders' Exchange. The meeting was called to order by President William C. Smith, who made an address of welcome, in which he stated that "If we would raise the tone and status of the profession, we must be better artists and architects ourselves, living for our art, and not altogether for its return in shekels. In our designs truth, honesty and common sense in construction and detail must characterize all our works. We must avoid contention and strife, and do right because it is right; and, withal, every architect must be a man of probity and a gentleman."

At the conclusion of the president's address Secretary Dismukes read his annual report.

George W. Thompson made the following remarks upon imperfect plans placed in the hands of builders for estimates:

Mr. Chairman and Gentlemen of the Convention: At a recent meeting held by the Builders' Exchange in this city, among other interesting subjects brought before the exchange for consideration, was the question of "How to remedy the great injustice done the builders by local architects, by submitting imperfectly, or partially finished plans, and specifications for competition?"

Being present at that meeting, and deeply impressed with the subject and the views expressed by members of the exchange, I have deemed it of sufficient importance to bring it before this convention, and ask your earnest consideration to the grave charges, as they affect not only the local, but our visiting architects, in fact, the entire profession.

The charge of incompetency, or, more properly speaking, delinquency as brought before the exchange, was all couched in courteous language, without vindictiveness, friendly to the architects, some going so far as to declare it was not the architect's fault, but the fault of the owners, who refused to pay a fair commission for his work. Without trying to locate the fault, or discuss as to who is to blame, I pass to the more serious charges made privately by members of the exchange since the meeting, which is, "that some architects purposely submit their plans incomplete for bids, that they can make the details light should a favorite win the job, and heavy if otherwise."

This is certainly a very serious charge and calls for prompt, decisive and radical treatment, as it reflects upon the entire profession. Whether this charge has any foundation in fact, or is the offspring of a disappointment by a defeated contractor, makes no material difference to us, the very fact that this pernicious practice is susceptible of such interpretation, shows that it is wrong, and should be guarded against by every architect who realizes the importance and dignity of his profession, and should there be any who fail to duly appreciate this, we, as an association, should by precept and example, teach them that the professional practice of an architect should be, nay must be, like the wife of Cæsar, above suspicion.

From another view, as a simple question of equity, the architect's work should be thorough and complete. After an examination of plans and specifications by a competent builder, there should be no question in his mind as to how much or how little, or the character of the work required by him. He should feel that he knows the value of the work to a dollar, feel that he can do it properly, and be fairly paid for it. The drawings and specifications should convey this assurance to the builder, verbal information, or explanations by the architect should not be needed, and is improper, misleading, as it conveys different meanings to men of different skill and experience, and if a practical builder has to do more than he estimated through faulty drawings, that builder is cheated, and if he does less, from the same cause, the owner and the losing competitors are cheated, and as a member of the exchange says, it is no uncommon thing for an architect to be damn'd by those who win and by those who lose the job.

From another (and perhaps to some, more effective) point of view, I think the architect should make haste to correct this abuse, at least the resident architect should, for I am satisfied from what I heard at the exchange, should the architects fail to voluntarily correct this abuse, the builders will compel them to.

For my part (if half of what I hear is true), I am surprised that the builders have not taken concerted action in this matter long ago. They

certainly have shown much patience and forbearance, and have earned the gratitude of every architect who values the good name of his profession. It certainly would be very humiliating to learn that a professional brother's office was boycotted by the builders, and far more humiliating to know it deserved this, or even more harsh treatment.

It certainly would be much better, if as an association we can stimulate each individual architect to act justly in this matter. To take a higher and broader view of the practice of architecture. To realize the importance, responsibility and dignity of his profession. If we can accomplish this much, it will amply repay for all trouble and expense in organizing this association. The visiting members will not think they have traveled a hundred miles in vain. There will be no threat of boycott by the builders, no complaint by the owners, and no need of builders using details made by other architects as is sometimes done in this city.

Then the architect who has been indifferent to his duty as an architect, will awake to new joys. The study and forethought necessary to carefully delineate his work in all its parts, will teach him to love his vocation as surely as the true man loves his wife.

To the true architect, the work of detailing is a work of love that cannot be entrusted to another hand, as interesting to him in all their developments as the model under the chisel to the sculptor, or Picciola to the prisoner at Fenestrella.

On motion discussion was deferred to the afternoon session. The session then adjourned, and at the invitation of the Nashville architects members were entertained at dinner. At the afternoon session the subject presented by Mr. Thompson was discussed, after which the following officers were elected:

President—James B. Cook, of Memphis; vice-president, P. J. Williamson, Nashville; secretary, Wm. C. Smith, Nashville; treasurer, Mr. T. L. Dismukes, Nashville.

Board of Trustees—James B. Cook, Memphis; William C. Smith, Nashville; J. F. Baumann, Knoxville; A. Delisle, Chattanooga; C. G. Rosenplaenter, Memphis.

Edward G. Frye and William Keiger were elected junior members, and B. J. Hodge and H. L. Gibel were elected associate members. After some further business of a general nature, including a vote of thanks to the retiring president, the convention adjourned to meet the third Tuesday in February, 1889, at Memphis. The quarterly meeting will be held the first Tuesday in June next at Nashville.

The Proposed Grant Monument Competition at New York.

THE Board of Directors of the Western Association of Architects has sent the following protest to the Grant Monument Association, of New York, dated March 30, 1888:

To Alonzo B. Cornell, Chairman, and Members of the Executive Committee of the Grant Monument Committee:

GENTLEMEN,—A circular has been received by many architects who are members of the Western Association of Architects, signed by you, and inviting competitive designs for a monument or memorial to be erected in New York over the tomb of General Grant.

In behalf of the Western Association of Architects, we desire to unite with the Architectural League in protesting against some of the terms of your circular. The sections mentioned by the league we deem objectionable, and we are convinced that they will prevent many of the best men in the profession from entering the competition.

We send herewith the "code" adopted by the Western Association. This was prepared with the greatest care, and was adopted by the association as a perfectly fair and equitable statement of the methods by which competitions might be so conducted as to be productive of the best results to both the public and the architectural profession.

Respectfully,

NORMAND S. PATTON,
Secretary.

SIDNEY SMITH, President.
WALTER R. FORBUSH,
J. J. FLANDERS,
C. F. SCHWEINFURTH,
GEORGE B. FERRY,
JOHN W. ROOT, Chairman,
Board of Directors.

The following letter was sent, on March 15, by the secretary of the American Institute of Architects, to the Grant Monument Committee:

To Messrs. Alonzo B. Cornell, Chairman, and Richard T. Greener, Secretary of the Executive Committee of the Grant Monument Association.

GENTLEMEN,—The trustees of the American Institute of Architects feel themselves obliged, in the interest of art and of the success of the project for erecting a monument to General Grant, to respectfully protest against the terms of the competition for said monument, as they are now set forth, and to state their objections to certain sections of the circular in which they are contained, as follows:

SECTION 2. Cost is an element of great value in determining character of design. The amount to be expended is not definitely named, as it should be.

SEC. 4. The eminent experts who are to advise the Association in the selection of designs should be known from the beginning, so that such as have not faith in the judgment of the said experts need not compete.

SECS. 6, 7, 8. All designs in the respective classes of architect and sculptor should be made to one scale and rendered in one manner. No architect should be at liberty to submit a model unless all are required to do so.

SEC. 13. As the first premium, the successful designer should be employed to execute his design at regular rates. The premiums named are insufficient in numbers and in amounts. No one of standing would willingly sell his design at the prices named or at much higher terms; and moreover, an unexecuted design would be of no use to the association except as a curiosity. All drawings, etc., save the one design adopted should at once be returned to the authors.

SEC. 14. The committee should only ask for a new competition on the recommendation of the expert jury.

SEC. 17. As above stated, the successful designer should, as a matter of course, be employed to carry out his design at regular rates. Competition, as regards rates of compensation would necessarily be demoralizing to the competitors, and possibly to the judgment of the committee.

While it is in accordance with extremely mercantile spirit to endeavor to obtain the maximum of value at the minimum of payment, yet such a principle applied to artistic work has a most depressing effect on talent, fails to call out high ideas and drives eminent practitioners entirely away.

A. J. BLOOR, Secretary.

To this letter the following answer was received by Secretary Bloor:

GRANT MONUMENT ASSOCIATION,

NO. 146 BROADWAY, NEW YORK CITY, March 20, 1888.

MY DEAR SIR,—I have to acknowledge the receipt of the protest of the American Institute of Architects, addressed to the Chairman of our Executive Committee. I shall take pleasure in having it read at the first meeting of the Committee, and have no doubt it will receive careful attention.

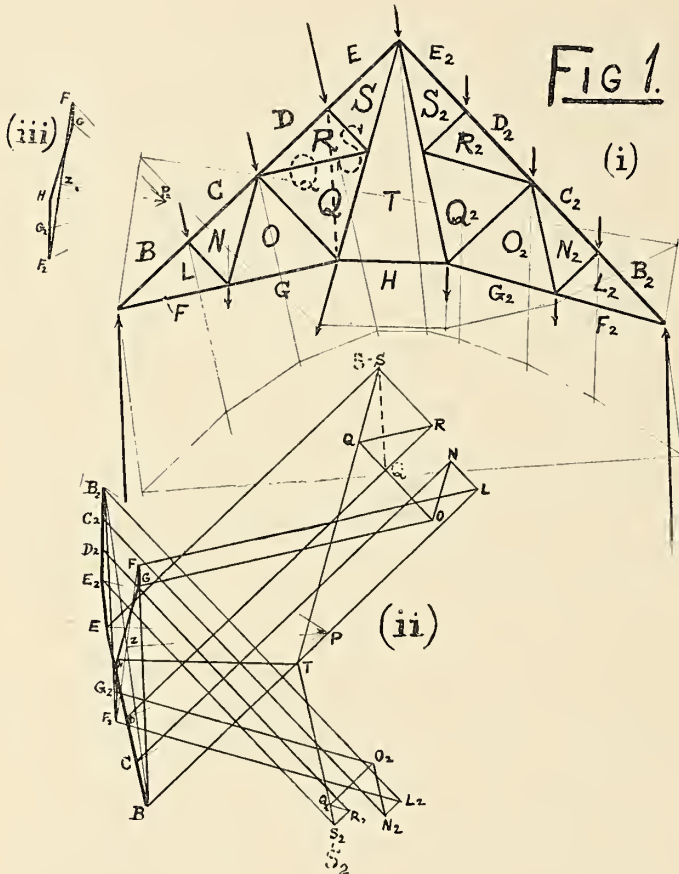
RICHARD T. GREENER, Secretary.

Some Applications of Graphical Statics.*

BY JAMES R. WILLETT, C. E. AND ARCHITECT.

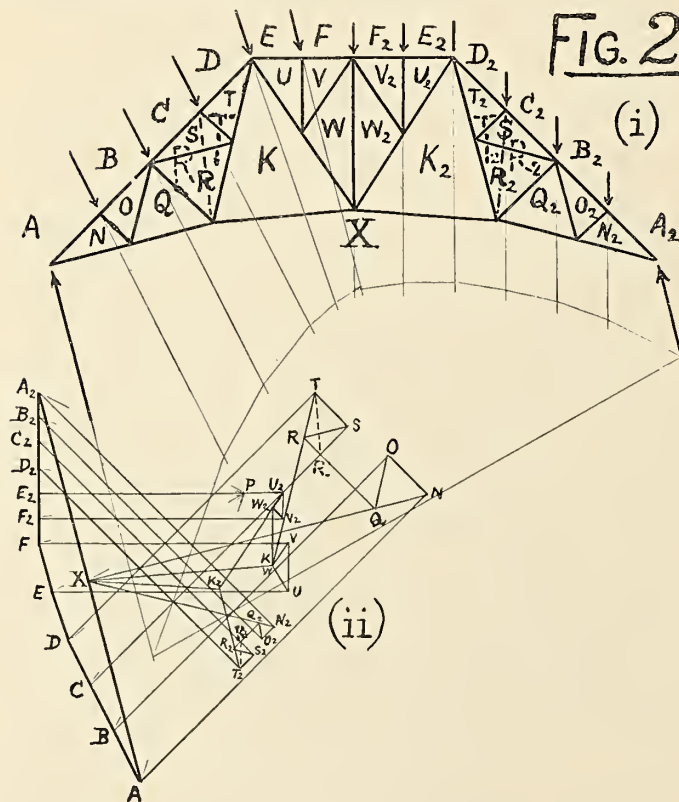
IT is intended in this paper to show how certain problems, where more than two unknown strains meet at a joint of a truss, the strains in the truss members can be found graphically, and to do this under any condition of loading.

Bow's notation is used, by which, in the truss or frame diagram, the line representing a member of the truss, or a force, is designated by assigning



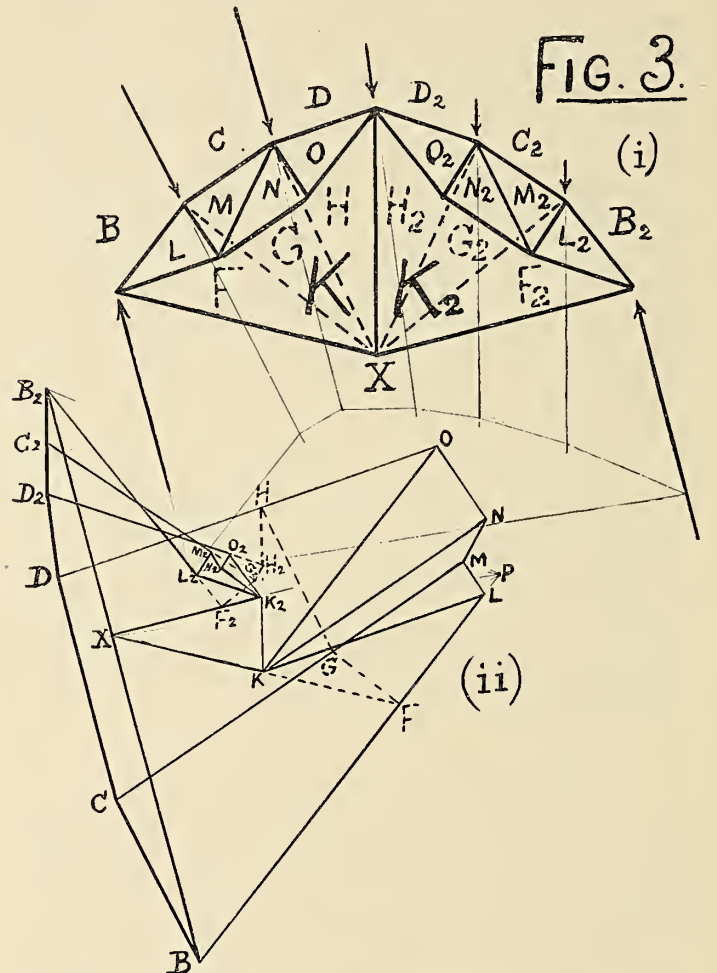
a letter to the space on each side of the line, and naming the line by both letters.

In the strain diagram these letters are placed at ends of the strain line corresponding to the given truss member or force.



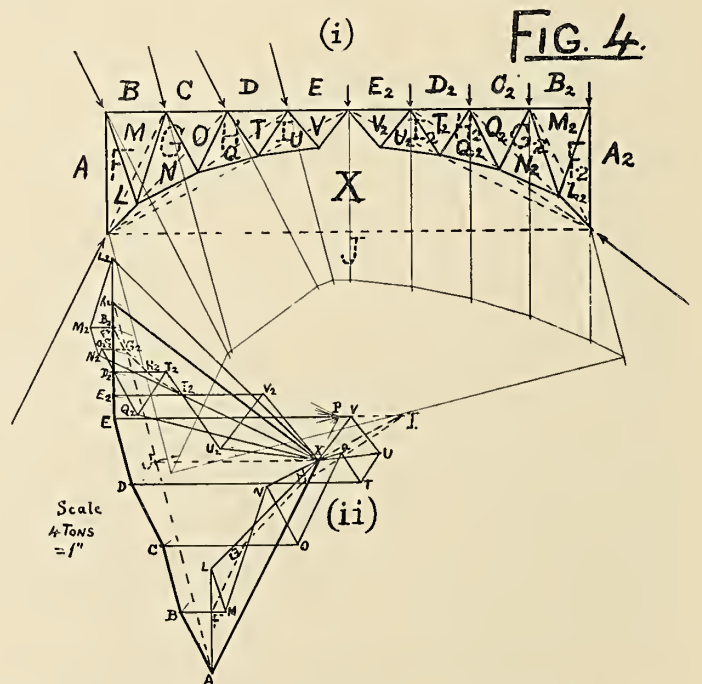
A triangle in the truss (or frame) diagram is designated by the letter placed within it. Thus the left hand triangle, Fig 1 (i), is designated by L, the central triangle by T, and the right hand triangle by L2.

The letter P (or P2) designates a pole by means of which the equilibrium polygon is drawn. The heaviest continuous lines denote the members of the truss or frame, and also the loads thereon. Lighter continuous lines denote the strains in the members. Faint continuous lines are used



for equilibrium polygon, and the direction of forces meeting it. The dotted lines indicate assumed auxiliary lines, which are used for certain purposes and then abandoned. Sometimes the positions of the continuous and the dotted lines coincide, and then the continuous line is drawn.

All, or nearly all, of the books on graphical statics explain how the strains in what is called by some the Belgian truss, and by others the



French or Fink truss, can be ascertained graphically, though this truss has more than two unknown strains at some of the joints; but this solution expressly depends upon the loads being all equal and vertical. We have never seen a solution attempted under any other conditions of loading.

* Paper read before the Chicago Chapter of the American Institute of Architects, March 22, 1888.

Fig. 1 shows such a truss. The loads are dissimilar both in directions and amounts.

Now it is practicable to solve all such cases graphically. We propose to show how this can be done.

See Fig. 1, where (i) represents frame diagram of truss, that is, it is the frame diagram; (ii) strain diagram of truss; (iii) diagram of loads on lower chord only; these loads being combined with loads on upper chord in (ii).

Find the reactions of the loads on the upper chord by means of the equilibrium polygon. Then of those on the lower chord in like manner as shown in (iii), combine these loads as shown in (ii).

Beginning at the left hand of the truss we can proceed in the usual way until the member OQ is reached. The triangle Q is an interior triangle. As the point T in strain diagram (ii), corresponding to triangle T in frame diagram (i), is yet unknown we cannot proceed further by the ordinary way. Let us proceed as follows:

Suppose that the members QR and RS in truss, or frame diagram be removed, and a member indicated by the dotted line and the dotted letters Q and S be substituted in their place. We can then proceed in the usual way, finding the strains in OQ, dotted QS, and ST. This will give us the point T in the strain diagram in its correct position, no matter how the space in frame diagram taken up by the triangles Q, R and S may be divided. Having this point T fixed in its proper place in the strain diagram, we can omit the assumed dotted member, return to the original frame of the truss and work out the strains in the usual way.

The position of T in the strain diagram could also be found by commencing at the right hand support of the truss, and, if correctly done, would be found to coincide with that already found.

In the strain diagram it would be found that the point Q would fall on the line ST.

It may be noticed that the points S and dotted S in the strain diagram are identical. This is the case where the triangle denoted by the letter in the frame diagram has a side forming part of the exterior lines of the truss or frame. Where a truss triangle, as Q, has no such side, the points Q and dotted Q do not coincide.

Fig. 2 is solved in a similar manner as Fig. 1, but it is necessary to commence at one support and work to the center, and then go to the other support and work to the center. In the strain diagram the point W₂ will be found to come vertically over the point W. That is, the line WW₂ in strain diagram will be parallel to WW₂ in the truss or frame diagram, as it should be. It may be noticed that the points K and W in the strain diagram coincide, but this is a matter of accident. To simplify matters no loads are taken on the lower chord.

Fig. 3 is taken from that well-known work, "Stoney's Theory of Strains." First, by means of the equilibrium polygon determine the reactions at the supports. This determines the point X in the strain diagram. From this point draw the lines XK and XK₂ of indefinite length.

Take the left hand point of support or joint of the truss or frame diagram. There are four forces, of which but one, the reaction, is known. By the usual way the problem is indeterminate. Suppose that the interior members of the truss LK, LM, MN, NK, NO and OK be removed, and members shown by the dotted lines and dotted letters F, G and H be substituted in their place.

Proceed in the usual way to find the strains in the members of the truss, as altered. We thus find the points in the strain diagram dotted F, G, H, H₂, etc. Having the dotted line HH₂, in frame diagram, prolong it downward until it cuts the lines XK and XK in the points K₂ and K. We then have these points known in the strain diagram.

Now suppose the assumed dotted members to disappear and all the members of the original truss to return to their places, we can then, having the points K and K₂ in the strain diagram, complete this diagram in the usual way, and thus obtain the strains in all of the members. It is not necessary to find the points in strain diagram of all of the dotted letters. Both of the points K and K₂ can be found when the dotted H is found; that is, when the dotted letters in one-half of the truss are found. It is well, however, to work from both supports and see that the position of K and K₂ coincide when obtained both ways.

There are other checks that should be observed. Suppose the point K in strain diagram to be found; then commencing at the left hand support find the strains in the members until the point O in strain diagram is reached. Now, in finding this point the line KO has not been used, nevertheless the point O should be on this line; that is, it should be on the line drawn from K in the strain diagram and parallel to the line KO in the truss diagram. The same is true of the point O₂ and the line K₂O₂. Fig. 4 is also taken from "Stoney's Theory of Strains," where it is called a "braced arch." Not having a tie, there is a thrust at the supports which therefore must be abutments. On this account the reactions at supports cannot be found, as in a truss, in the ordinary way by means of the equilibrium polygon. Let us proceed as follows:

Suppose that the dotted line JX in the frame diagram be drawn and supposed to act as a tie, then there will not be any thrust at the supports. In other words, the frame diagram will cease to act as an arch, and can be considered as a truss. The point dotted J in the strain diagram can then be found in the ordinary way.

Suppose now that the members LM, MN, NO, OQ, QT, TU, UV and VX in frame diagram be removed and be replaced by the dotted lines, which are designated by the dotted letters.

Commencing at left hand support of frame diagram, proceed in the usual way and find the points denoted by the dotted letters F, G, H and I, also the point denoted by the letter X, which is thus obtained in its proper position.

Suppose now that all the dotted lines and dotted letters be removed and the original frame to reappear, then having the point X in strain diagram already fixed, the strains in all of the members can be obtained in the usual way. By drawing the lines AX and A₂X in the strain diagram the reactions at supports are shown. Though it is not necessary, it is well, by commencing also at the right hand support, to ascertain the position of X. If it is correctly done it will coincide with the position already found.

There are some other checks. Suppose the point X in the strain diagram to be found. Then commencing at any point, say the left hand support of frame, find the strains in the members until point V in the strain diagram is reached, remembering that in getting it the line XV has not been used. Now the line joining X and V in the strain diagram should be parallel to the similarly lettered line in the frame diagram. The same is true of the point V₂ and the line XV₂. After the point X in strain diagram is obtained, it is not necessary to commence at a point of support in order to obtain the strains. Indeed, it will generally be found best to commence at the center of the frame.

This method can be applied to an infinite number of trusses or frames.

The Indiana State Soldiers' and Sailors' Monument Competition.

UNDER an act passed at the last session of the legislature of the state of Indiana, a competition was inaugurated calling for designs and estimates for a monument to be erected in memory of the soldiers and sailors of the state. The act ordered the appropriation from the general fund of \$200,000, and the appointment of a commission for the proper carrying out of the project, with general instructions for their guidance, but placing in their hands the power to collect further funds in the way of contributions, etc.

The commission appointed, in accordance with this special act, consists of George J. Langsdale, president; D. M. Ransdell, S. B. Voyles, George W. Johnston, D. C. McCollum. James F. Gookins, an artist of note and a man largely qualified by experience to fill the office of secretary to such a commission was elected by the board to fill that position. The gentlemen composing the commission were selected from the most prominent and trustworthy in the state, and when the first circular was issued in compliance with the law and found to outline a form of competition which the architectural profession would consider it unprofessional to enter into, and being so informed by their secretary and also by THE INLAND ARCHITECT, they recalled the circular and proceeded to ascertain upon what plan designs from the best architects in the country or the world could be obtained.

The result was the engagement of three experts for the proper adjudication of the competitive drawings and the formulation and issuing of a competition circular. These were Professor William R. Ware, Professor of Architecture, of Columbia College, New York; Professor John L. Campbell, of Wabash College, Crawfordsville, Indiana, and General Thomas A. Morris, a commissioner of the Indiana State Capitol building, Indianapolis. The following is the competition circular issued, the instructions regarding ground, estimate of cost being omitted:

COMPETITION.

This commission is directed and empowered to erect a monument or memorial structure to cost \$200,000, and additional donations, on Circle Park in the city of Indianapolis, and to prepare, select, or adopt a design, and to appoint the author thereof to carry on the work.

The commission has invited Architects

Richard M. Hunt, of New York,
George B. Post, of New York,
Van Brunt & Howe, Kansas City,
Cabot & Chandler, of Boston,
T. P. Chandler, of Philadelphia,

Burnham & Root, of Chicago,
Frederick Baumann, of Chicago,
Jas. W. McLaughlin, of Cincinnati,
Adolph Scherrer, of Indianapolis,
Peabody & Stearns, of St. Louis,

To prepare sketches for the proposed structure, for which each of those invited will be paid the sum of \$200.

The commission will receive and entertain designs by other architects and sculptors not so invited.

It is the purpose of this competition to assist the commission in determining the general character of the monument to be erected, and, if possible, to select an architect or sculptor. All questions as to the character and special treatment of the groups, statues, reliefs and other artistic and decorative details are left to be determined hereafter in consultation with the architect or sculptor selected, and with the special experts in these arts, who will be invited to aid the commission in the selection and direction of this part of the work.

The commission will not at this time receive any tenders of contract or proposals to execute the work.

* * * * *

The design may comprise a tower or column, a memorial hall or vestibule, with mosaics, bas-reliefs, statues, or groups of sculpture, either out of doors or within, and it is for the competitor to judge which of these features to employ, and in what proportion they shall enter into his composition.

* * * * *

The following drawings, and these only, will be furnished by each competitor: one plan, one elevation, one section, one perspective, one plan of the park, showing the location of the structure and the treatment of the surroundings.

These will all be drawn to a uniform scale of one sixteenth of an inch to the foot, and finished in line with India ink with the drawing pen. They are to be back lined, and no shadows are to be cast. There is to be no brush work except in blacking windows and the sections of the walls and floors. The lettering and figuring is to be plain and simple, like ordinary printing type, and is to be confined to the names and dimensions of the rooms or other features of the structure, written in the middle of each, without explanatory comments, which are to be put by themselves, as has been said, in a separate memorandum.

The perspective, also, is to be drawn in line only, without background or foreground, and without shading, even in windows; the structure to be set at an angle of 45 degrees with the plane of the picture, the vanishing points being set 30 inches apart, and the nearest point of the structure, which is to be the southeast corner, set 12 inches from the right-hand vanishing point. The horizon is to be taken at the level of the principal floor. The scale of the perspective is to be twice as large as that of the elevation, on the nearest corner, or one-eighth of an inch to the foot. The plan of the lot is to be on a scale of 1-64 of an inch to the foot.

Any of the competitors may present more than one design if he chooses to do so, and may show alternatives and variations in any of the drawings by means of "flaps" attached to it, but no additional or extra drawings, besides the five asked for, will be received in any one set.

These drawings are to be made each upon a half-sheet of imperial paper, the paper being cut down to the dimensions of 13 by 20 inches, and surrounded by a single line for a border. Each drawing, and also the accompanying memorandum, is to be distinguished by a motto or cipher, and no handwriting of any sort is to be put upon either. A sealed envelope, bearing the same cipher or motto, is to contain the name and address of the writer, and he may inclose with it any information in regard to his training, experience, or present professional position, and his qualifications for carrying out the designs necessary to the completion of the work, or for conducting the work itself, to a conclusion, or for both, which he may desire to bring to the notice of the commission.

These drawings are not to be framed, glazed, nor even mounted on cardboard, but are to be delivered flat in a sealed portfolio, expressage paid, on or before December 12, 1887, to the Board of Commissioners, in care of George J. Langsdale, president, at Indianapolis, Indiana.

The commissioners will, at 2 o'clock P.M., on the day named, and from day to day until the business is concluded, proceed, with the assistance of the Board of Experts, to

give a thorough examination of all drawings which may have been submitted, and forthwith select and adopt that one which they find suitable, if any such there be.

The plan or design so selected shall become the property of the state, and its author will be appointed supervising architect or sculptor, to erect the structure, if the commissioners find that, in their judgment, they are warranted in doing so, it being distinctly understood that no design will be adopted, and no such appointment made that is condemned by any one of the Board of Experts, who will be required to furnish a written report, setting forth the results of their examinations, with their comments and recommendations, and that this report of the experts will be regarded and fully considered by the commissioners in making their selection. But if, as may happen, they find themselves unable to choose, upon the evidence before them, between two or more of the designs, they will invite the competitors between whom their choice then lies to present, under the instructions of the commission, such further explanations as the questions at issue may require, and, if they find it necessary to do so, will institute a second competition among them, for which a sufficient time will be allowed. If any one of the designs is then found to be suitable, and is accepted, the successful competitor will in this case, as in the former case, be appointed to be the supervising architect or sculptor. But in neither competition will a design, otherwise acceptable, be rejected on account of its cost, without first giving its author an opportunity to justify his estimates.

In any case the supervising architect shall be paid a commission of five per cent on the total cost of the work, including all sculpture and other decoration, and the embellishment of the grounds.

If a design presented by the competitors is adopted by the commission a premium of \$500 will be paid to the author of the second best design, if it is in every respect suitable for execution. In case no designs are accepted no premiums will be paid.

Each of the architects invited to take part in the second competition, should such a competition be instituted, will receive from the commission a sum not exceeding \$400, as compensation in full for their additional services, whether he is or is not of the number of those specially invited to take part in the first competition. The unsuccessful competitors not so invited will not receive any remuneration.

In case of the successful competitor in either competition, such payments as have been made to him will be considered as payments on account of his commissions as supervising architect.

The commission reserve the right, in case their choice falls upon an architect whose experience and professional standing do not, in their judgment, warrant them in putting the practical conduct of the work into his hands, or who, by reason of distance, does not desire to undertake it, to associate with him some experienced person, to be nominated by himself, subject to the approval of the commission, and upon whose competency in this respect they can rely, paying to each his share of the customary fees for his share of the work.

The commission will also, if they deem it necessary, employ a superintendent, whose duties and compensation shall be prescribed by them.

The commission reserve the right to reject any and all plans should they not succeed in finding one which, in their judgment and that of the Board of Experts, is suitable.

All drawings will be returned to the competitors as soon as the commission has made its selection, and they will not be shown to the other competitors, nor to the public, without the consent of their several authors, previously obtained in writing, but only to the commissioners, their secretary and the Board of Experts appointed by them.

Nor shall anything shown in any of the rejected designs, or otherwise suggested by any of the rejected competitors, which is original with him as to this competition, be adopted and made use of without the consent of its author and proper remuneration being made him, the amount thereof to be agreed upon between him and the commission, and in case of disagreement, to be referred to the Board of Experts.

The commissioners will allow no direct or indirect conferences with any competitor, in public or in private, and any information that any of them, or either of the Board of Experts may find proper to communicate to any one of the competitors, in answer to questions or suggestions, will be made in print, and will be simultaneously communicated to all the rest. Such questions or suggestions must be made before the 15th of October, and should be addressed to, one of the undersigned, who will communicate with each other before replying.

The final action of the commission and the report of their Board of Experts will be communicated to all the competitors.

By order of the Board of Commissioners,

GEORGE J. LANGSDALE,
President.
WILLIAM R. WARE,
JOHN L. CAMPBELL,
THOMAS A. MORRIS,
Experts.

JAMES F. GOOKINS,
Secretary.

On January 26 last, the experts made their report to the Board of Commissioners, the result being announced in the following circular sent to the competitors:

OFFICE OF THE STATE SOLDIERS' AND SAILORS' MONUMENT COMMISSION,
MR. INDIANAPOLIS, Ind., February 1, 1888.

DEAR SIR,—The competition provided for by advertisement and the code of instructions to designers, and subsequent bulletins, issued from this office for the Indiana State Soldiers' and Sailors' Monument, resulted in the submission of seventy sets of drawings to the commission, the examination of which began January 12 and ended on the 27th of the same month, in the selection of that one of the designs marked, "Symbol of Indianapolis," executed by Bruno Schmitz, of Berlin, Prussia, as first choice, and that one marked "Acta Non Verba," by Percy G. Stone, of London, England, as second choice, and in consequence Mr. Schmitz has been selected to take charge of the erection of the proposed structure. This action is unanimous, and is done on the unanimous approval of the professional advisers of the board, whose report is sent herewith.

In returning your drawings I am instructed to convey to you the thanks of the commission for the trouble you have taken, and for the interest you have shown in the problem confided to them. I am very truly yours,

GEORGE J. LANGSDALE, President.

The following interesting and exhaustive reports were presented by the experts and are printed in full. If the architects whose designs the numbers and mottos represent, will notify THE INLAND ARCHITECT, the names will be published next month. It might be well to state here that the name of no competitor was known until after the final choice of a design was made:

REPORT.

I.

INDIANAPOLIS, IND., January 26, 1888.

To the Board of Commissioners of the State Soldiers' and Sailors' Monument, of Indiana:

GENTLEMEN,—We have examined the designs sent in to you on the 12th inst., and beg to make upon them the following comments, which may be of service to you in your deliberations, reserving any recommendations which, on further consideration, we may wish to make, until a later moment.

Of these designs, which the commission have, for their convenience, numbered from 1 to 70, we understand that No. 6 and No. 7 were set aside at the outset, their author having signed his own name to the written description which accompanied them contrary to the provisions of the printed instructions. One, No. 69, was rejected on account of the excessive cost named in the estimate that accompanied it.

Of the remaining sixty-seven, fourteen show a memorial hall alone. Of these, the two numbered 10 (with the motto "Hero Worship"), and 11 (with the motto "Vincit Amor Patriae"), seem to us most deserving of serious consideration, though No. 16 ("Ad Mortem Fidelis"), No. 40 ("Jacques-Cœur"), and No. 53 ("San Vitale") have great excellence. Twelve show a tower, of which the best seem to us to be No. 28 (Symbol—A square with four circles at its corners), No. 34 ("La Tour D'Auvergne"), No. 60 ("Circumspectus"), and No. 66 (Symbol—A sword and scroll, "Indiana").

Thirteen show a hall and tower combined, of which No. 46 ("Arma Virumque Cano," No. 2), No. 55 ("Tippecanoe"), and No. 62 ("Veni"), seem the most successful.

Nine exhibit a column or other form of monument, many of which are admirable, especially No. 4 ("Symbol of Indianapolis"), No. 22 ("Pro Patria," No. 1), No. 32

("Eagle"), No. 64 ("Art"), No. 67 (Symbol—A disk partly eclipsed), and No. 68 ("Acta Non Verba").

Eight show a column, or other form of monument, in combination with a hall. Of these, No. 25 ("A Martial Strain"), No. 48 ("Iroquois"), No. 49 ("Loge"), and No. 65 (Symbol—A circle and T), are the most pleasing.

There are twelve others which it is somewhat difficult to class, one of which shows a pyramid, one a cone, and one a hemisphere as its principal feature. Among them are two panorama buildings, one or two triumphal arches, and several for which it is hard to find a name. No. 1 ("Wabash," No. 1), No. 2 ("Wabash," No. 2), No. 30 (Symbol—Capital of column in circle), No. 43 ("Pro Patria," No. 2), No. 45 ("Finis Coronat Opus"), are the most interesting.

Altogether, we find twenty-seven out of the sixty-eight among which the choice of the commission must lie, if their judgment at all coincides with our own. Of these, we commend eight to their special attention as presenting practicable and more or less acceptable solutions of their problem, namely, No. 10 and No. 11 among the halls; No. 4, No. 64, No. 22, and No. 68, among the single monuments; and No. 25 and No. 65 among those which combine a monument above with a memorial hall beneath.

I. MONUMENTAL HALLS.

The designs numbered 10 and 11 both present the characteristic advantages of this form of monument, in that the groups of sculpture and statues, bas-reliefs and inscriptions, which constitute the chief articulate expression of the purpose of the structure are protected from the weather. This makes it possible to employ marble and other materials, both in sculpture and in painting, which are impossible out of doors. Moreover, it enables these works of art to be seen in comfort, the visitor also being protected from heat and cold, rain and sun.

In design No. 10 \$50,000 or \$60,000 is devoted to the building itself, and \$150,000 to the works of art it is to contain. In this it has the advantage of No. 11, in that it sets artistic expression before mere size. No. 11, which proposes to put \$50,000 worth of sculpture into a \$150,000 building, is at a double disadvantage, being too big for the site, and not richly enough furnished within. But in point of general aspect and monumental character and expression it has the advantage of No. 10.

II. COLUMNS OR SHAFTS.

Of the next four designs two show round columns, two square shafts.

No. 22 presents a Corinthian column and pedestal, supported by a sort of stepped pyramid, which, with a vertical wall on which it rests, is about 40 feet high. This wall is covered with reliefs. Below are steps and terraces carrying four single figures. On the top of the column is a colossal figure, the head of which is 160 feet from the ground. For these sculptures \$100,000 is allowed in the estimate. The column is extremely well designed, and the substructure, though a little large, is effective and dignified.

No. 68 also shows a large Corinthian column and pedestal, 240 feet high, resting upon a high plinth, adorned with reliefs and carrying four colossal panthers, recumbent, at the four corners. Besides this there is a figure 20 feet high at each corner, and a figure 30 feet high on top. The sculptured frieze, 340 feet long, is, however, omitted from the estimate, as are also certain steps, terraces, balustrades and groups of sculpture occupying the whole park, and which, as is explained in the memorandum that accompanies the design, are only a suggestion of what may, at some future day, be added if other funds become available.

The other two designs of this division, No. 64 and 4, show square shafts. These also differ greatly in size.

No. 64 is like the preceding, about 190 feet high and 150 feet across the lowest steps. The steps and the basement of the monument are round, the basement bearing a high sculptured frieze, and the steps below supplying eight pedestals carrying seated statues and four smaller ones with standing figures. On either side of the shaft near the bottom are single figures of a soldier and of a sailor, and in front a seated figure. The whole makes an interesting and very unusual composition, and the transition from the square superstructure to the round pedestal on which it stands is effected by an artistic device of unusual felicity.

No. 4 also shows a square shaft. It is about half as big again in every dimension as No. 64, measuring 200 feet across the lowest step and 265 feet in height. The approaches occupy nearly the whole of the park. Four men on horseback, four groups of figures, and a gigantic statue on top, with some trophies of arms and braces of ships, form the sculptured decoration. Fountains are shown on two sides, steps on the other two.

This is one of the most brilliant and striking of all the designs sent in, and shares with the preceding design, No. 64, the special quality of vigor that seems to result from the use of a square shaft instead of a round one. It is to be noticed also that the capital of a square shaft does not overhang at the corners so much as does that of a round one. It thus avoids a problem of construction which in a column of colossal proportions may sometimes prove difficult to meet.

In the estimate for this monument only \$45,000 is allowed for sculpture.

III.—THE HALL AND MONUMENT COMBINED.

Of the two designs to which we invite your attention, which combine a monument with a memorial hall, one shows an octagonal shaft, one a square one.

No. 25 ("A Martial Strain") shows an octagonal shaft about 190 feet high, rising from a large platform of similar shape. In both shaft and platform the sides of the octagon toward the cardinal points project so as to give a slightly cruciform plan, and the intermediate sides are convex. This platform is 70 feet across and 40 feet high and contains, within, ample space for memorials.

No. 65 (Symbol—A circle and T) shows a somewhat similar arrangement. But the platform and shaft are square, and the platform only 20 feet high. It is about 130 feet across. The total height is about 190 feet.

This is the only design in which the monument is placed, not in the center of the circle but toward the northern side. The idea is already familiar to the commission. The advantages and disadvantages of this arrangement are various. It has the advantage of not bringing the monument into competition, in size, with the state house dome, and of not interfering with the view of the dome down Market street, which the people of Indiana have spent a good deal of money to obtain. It secures, through the falling off of the ground, sufficient height of the substructure, inside, without making it very high on the outside. Moreover, it conforms to a recognized principle in the location of buildings upon restricted sites. It is well understood that if a large structure is to be put upon a small piece of land it should be set near one side of the lot. It is better to have ample space in front than to be pinched all around.

On the other hand, the position suggested, though it leaves the monument in the axis of Meridian street, removes it from that of Market street. It also brings it much nearer the buildings on the north side than those on the east, south and west sides of the park, and so may be considered to work an injustice to property holders on the north side. We do not think that this consideration should have any real weight, as the abutments have no vested rights that should work to the public disadvantage. But the injury to these neighbors from the somewhat greater proximity of the monument would probably be less than is imagined, and North Meridian street would suffer no injury from having the monument brought nearer the end of the street.

We have reported the estimates just as they are given by the designers. The variation in the cost assigned for the monument itself, after the allowance for sculpture is deducted, is so great that it will be necessary for the commission to verify these figures before coming to any practical conclusion.

II.

January 27, 1888.

It is the purpose of this competition, as expressed in the pamphlet of instructions: First. To assist the commission in determining the general character of the monument to be erected; and,

Second. To select, if possible, an architect or sculptor, to whom to intrust the work.

We understand that the first of these ends has been accomplished, and that the commission are of opinion that the monument should consist of a shaft or column alone, as its chief feature, and that this should not have a memorial hall associated with it.

We understand, at any rate, that of all the designs presented, the two which they prefer, answer this description, and that these are No. 4 and No. 68.

In this state of things, three courses are open to the commissioners, under the rules of procedure they have adopted:

First. They may forthwith select one of the designs before them, and appoint its author the architect of the monument; or,

Second. If they do not feel warranted in doing this, they may proceed to obtain such further information to guide their choice, as they may require, and make their decision upon the strength of that information; or

Third. They may open a second competition, with more definite instructions, among such of the present competitors as have sufficiently commended themselves by the drawings now in hand.

In view of these alternatives we beg respectfully to make the following

RECOMMENDATIONS.

I. We recommend them, in the first place, not now to appoint the author either of No. 4 or of No. 68, as the architect of the monument, since we regard the evidence furnished by the drawings as insufficient for a satisfactory choice between them.

Design No. 4 is, as we have said, on the whole, the most striking and brilliant of all those presented, and the scheme of a square column with cap and base is an unusual, if not an entirely novel, conception, though it has three times presented itself in this competition. Whether it would in execution fulfill the promise of his sketch depends upon the artistic resources of its author, of which such a sketch can of course give but slight evidence. The very boldness and originality of the scheme also lay it open, in execution, to the chance of crudeness, and the commission would hardly be justified in running this risk. Before giving the work to its author for execution they need to be assured that it will be safe in his hands. This assurance may come either from such further studies as he may furnish, or from equivalent evidence from other work already executed by him.

With design No. 68, on the other hand, the danger is of just the opposite kind. The merits of this scheme are incontestable, for they have been tested again and again for eighteen hundred years. A Roman column on a pedestal, with more or less of steps and terraces beneath, has, since the times of Trajan, been the most common type for memorials of this class. It is a sure recipe, which never entirely fails, and to this it owes its almost universal acceptance. But this very commonness makes it very difficult to achieve a real success with it. Nothing but unusual personal resources of taste, sensibility and artistic power can redeem it from the commonplace. Of these qualities the sketch affords no token, as it could indeed hardly be expected to do, and it would be extremely hazardous to intrust the execution of the design to its author without knowing who he is, what he has done and what he would propose to do.

II. We recommend, then, that the commission take the second course open to them, and adopt the first of the alternatives provided in their programme. We advise them to inform themselves of the names of the authors of No. 4, No. 68, and of as many more as they find needful in order to reach a conclusion, and if a knowledge of the names suffices, as it may, to give the information they need, to make a decision at once upon that basis. If this proves insufficient and it seems desirable to do so, they can then ask further explanations and additional drawings. It is to be hoped that this may make a decision possible without great delay.

The commission need not hesitate to adopt this suggestion from any feeling that in so doing they would be departing from the policy of basing their choice among these designs solely upon their merit, without the possibility of personal bias. This policy has been carried out. For a fortnight they have been studying these designs, with no knowledge as to their authors, and their present judgment, by which two or three are preferred to the rest, is the result. This is as far as, in the nature of things, that policy can be expected to carry them, and as far as was contemplated in the programme which they adopted, and by which they are guided. The language of the printed *Instructions* is that, if possible, they will go a step further and make a final choice, without breaking the seals, and the dangers of that step, namely, that it may lead to the appointment of an inexperienced or irresponsible person, are sedulously guarded against in a subsequent paragraph. But this is all regarded as a bare possibility, not likely to occur, and the step now proposed, that the choice being thus narrowed, the seals shall be broken before a final conclusion is reached, is what the programme regards as the most natural and probable course of procedure.

Nor can it be objected that if the commission can now inform themselves as to two or three of the competitors they might at any time have learned the names of all, and thus vitiated the whole scheme at the outset. Their rule provides that they shall inform themselves only in regard to those between whom their choice really lies, and this only when the evidence furnished by the drawings themselves has been proved to be insufficient for judicious action.

III. In case this proves unsatisfactory the other alternative provided in their programme will still remain open to them, namely: to hold a second competition, under fresh and more precise instructions, between the competitors who have most commended themselves by their work in the first competition. This number should be extended, it seems to us, beyond the two or three who have offered the best solution of the problem as it now presents itself—the problem of a shaft or column—and should include those who have best solved the more general problem presented in the programme. In other words, it should include the authors of the designs between which the choice of the commissioners lay before they had selected designs in which the column plays the chief part, not after they had done so. This course of procedure, though not obligatory upon the commission, even under their own rules, for they are at liberty to reject all the designs as unacceptable, seems to us to be the proper course under the circumstances. As large a proportion of the designs sent in show excellence, as it was reasonable to expect. This merit is of a high order, and a number of them have been received by the commission with marked favor. It would be wasteful and unreasonable, therefore, to throw them aside without making every effort to utilize them if possible.

Moreover, this is not only, as it seems to us, the proper thing to do, but it offers the best chance of bringing these labors to a speedy issue, and that without running any real risk for the sake of promptness. Indeed, no ultimate risks are taken at all, for it is competent for the commission, if at last the result, even of a second competition, proves unsatisfactory, to reject all designs and begin again.

III.

January 27, 4 P.M.

The commissioners having selected design No. 4 as the one which in their judgment is most suitable for the Indiana State Soldiers' and Sailors' Monument, we hereby approve the selection, and cordially agree with them that, if the design is properly executed, the result will fulfill the best expectations of the people.

All of which is respectfully submitted by your obedient servants,

WILLIAM R. WARE,
JOHN L. CAMPBELL,
THOMAS A. MORRIS.

This circular was sent not only to the architects of the United States, but to foreign countries and was accompanied by a monograph of Indiana history, which was of great value to the designers.

Of the seventy designs reviewed by the experts (representing about sixty-five architects, several having two portfolios), two designs were from Italy, four from Germany, two from England and two from Canada.

Frederick Baumann, architect, of Chicago, has been appointed deputy architect, to represent Architect Schmitz, and superintend the construction of the monument.

A synopsis of the descriptions accompanying the designs of nine of the ten paid competitors, which are illustrated in this number, is given with other descriptions of illustrations.

La Semaine des Constructeurs gives the following list of theater fires in 1887, including concert halls and equestrian halls: January 10 and 16, at Gottingen, Prussia, and Sidoli, Bucharest. February 13 and 17, at Northampton, England, and Laybach, Illyria. March 28, at Gaud, Belgium. May 26, Opera Comique, Paris. June 2, 6, 26 and 28, at Odessa, and Leschin, Russia; at Rotterdam and at Rouen. July 1, 9 and 30, at Carceres, Spain; variety theater at Hurley (?), United States, and at Venloo, Holland. August 25, Stockport, England. September 6 and 14, at Exeter, England, and at Calais, France. November 2, at Hamburg, and December 28, at Islington, London. As to this country the list is manifestly incomplete. It is noteworthy that the greatest frequency of theater fires was in June and July, months when the heating apparatus could not have been in use. In the above named casualties some four hundred lives are said to have been sacrificed.

Our Illustrations.

COMPETITIVE DESIGNS FOR A STATE SOLDIERS' AND SAILORS' MONUMENT AT INDIANAPOLIS, INDIANA.*

Accepted design by Architect Bruno Schmitz, of Berlin, Prussia (motto, symbol of Indianapolis). A column surmounted by a statue, with base encircled by bas-reliefs and statues. Height 265 feet.

Design submitted by Architect Richard M. Hunt, of New York (motto "Pro Patria"). Mr. Hunt favored a "tower or column" rather than a "memorial hall." Height 168 feet, rising from terrace 96 feet square, occupying the middle of a platform 160 feet square, the square being adopted as more impressive than the circular form. At the junction of streets platform masts similar to those of the place St. Marks, Venice, are introduced for banners to be displayed on gala days. Pedestals for four statues on each of the four sides for statues of the "war governor," the army, the navy, and the sanitary commission. The shaft of the column is subdivided by four bronze bands. The capital of the column is Corinthian, and is crowned by a symbolical figure in bronze, of Indiana.

Design submitted by Architect George B. Post, of New York (motto a Corinthian capital inclosed in a circle). A cruciform structure with the motif of the Roman triumphal arch for façades. The monument to be crowned by a copper statue of Indiana, bearing in the hands or in crown an arrangement of electric lights. Estimate of cost, \$183,378.

Design submitted by Architects Van Brunt & Howe, of Kansas City, Mo. (motto "Paladio.") Classic in form with the motif of the Roman triumphal arch. Surrounded by terrace with balustrade, interrupted by four pedestals for statues of "war governor," "war president," a successful leader of the armies and some distinguished soldier of the state. The second stage to be occupied mainly by commemorative inscriptions, etc. A colossal statue of Peace in gilded bronze should occupy the third or middle stage. The whole structure is crowned at a height of 150 feet by a globe supported by four eagles. Estimate of cost, \$190,081.08.

Design submitted by Architects Cabot & Chandler, of Boston (motto "Ad Mortem Fidelis"). A memorial building, with two rotundas and four main entrances, each occupied by statues, bas-reliefs and historical relics, etc. The building to be placed on a terrace, relieved by gardens laid out with flowers and shrubs. Estimate of cost \$197,614.90.

Design submitted by Architect Theophilus P. Chandler, of Philadelphia (motto, an escutcheon bearing an oak leaf). A combined memorial hall and tower. Circular hall 80 feet in diameter, vaulted roof supported by sixteen columns. Estimate of cost, \$200,000.

Design submitted by Architects Burnham & Root, of Chicago (motto "San Vitale"). A memorial hall. A central rotunda surrounded by alcoves, whose chief exterior effect is in reinforcing the central dome, as in the case of Santa Maria del Fiore, in Florence. The motifs for all decoration are taken from flora and fauna of the state and the insignia of war and peace. The whole composition is surmounted by a statue of Fame. Estimate of cost, \$178,830. Also a design (motto "Jacques-Cœur") different in composition, but similar in purpose to the first. Estimated cost, \$190,040.

Design submitted by Architect Frederick Baumann, of Chicago (motto "Suum Cuique"). A memorial hall surmounted by a statue of Victory. Estimated cost \$200,000.

Design submitted by Architect James W. McLaughlin, of Cincinnati (motto "Tippecanoe"). Combined memorial building and tower.

Design submitted by Architects Peabody & Stearns, of Boston (motto "Veni"). A large central tower surrounded on three sides by a detached semicircular structure, to serve as a memorial hall. Space is left in upper portion of tower for chime of bells. Estimate of cost \$193,150.

Design submitted by Architect L. S. Buffington, of Minneapolis, Minn.

NOTE.

Owing to a misunderstanding of the description received, the designs for a city front by the Buffalo Architectural Sketch Club, published in March number, were given as first, second, third and fourth place designs. The first place was awarded to F. R. Fuller, as published, but the other three were a tie for second place. This correction is due to the three who stood equally high.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence for George R. Preston, northeast corner Walnut and Twenty-second streets, Philadelphia, Pa. Frank Furness, architect.

Five full page plates of the Young Men's Christian Association building, Detroit, Mich., Mason & Rice, architects, showing the following views; General exterior view with floor plans; detail of front entrance and lobby; detail of front arch and grate; reception hall; secretary's office. The main entrance to the building is on Grand River avenue, where broad doors of paneled oak and stained glass lead to a wide stairway with walls of richly paneled bog oak of a sage-green color. This opens into the main reception hall, a capacious and luxurious room, with ceiling of terra-cotta plaster work and bog oak beams. On one side is a fireplace, reaching from floor to ceiling. Richly-carved pillars of Lake Superior redstone form its sides, and above are elaborate carvings in oak, with a design of the society's national emblem. The hall is little short of an opera house. The woodwork and frescoing are unusually elegant. The proscenium arch opens on a shallow stage, without scenery, for it is designed to have only concerts and lectures in the hall. It will seat 800. The fifth floor is unfinished, and this will give a means of future expansion. In connection with the gymnasium is a swimming pool, 35 by 17 feet in dimensions, from 4 to 7 feet deep, and containing 13,000 gallons of water. There are also private bathrooms with shower attachments, etc. Among things specially noticeable in the building is the ventilation. This is not a patent process, but it is so effective that the air of the hall is changed every eight minutes. The chandeliers are designed to match the furnishings.

* These designs, with the exception of the accepted design and that of L. S. Buffington, were submitted by the invited and paid competitors.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1888. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. Next quarterly meeting, first Tuesday in June. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1888. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. G. W. Williamson, secretary. Annual meeting, November 5, 1888.

CHICAGO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

The chapter held a regular meeting on March 22. Dinner served at 6 P.M., at conclusion of which business meeting was held.

Three applications for membership were favorably considered.

A printed extract from the minutes of February 2, of the New York chapter, relative to the proposed competition for the criminal court's building in that city, was read. By a unanimous vote, the secretary was instructed to express to the New York chapter, the hearty concurrence of Chicago chapter in the opinions expressed in those minutes.

A communication from the board of trustees of the American Institute of Architects, relative to the claims of the late Thomas U. Walter against the United States Government, was referred to a committee.

James R. Willett, architect, read a paper on "Graphical Statics applied to Architectural Questions." At the conclusion of the paper, a vote of thanks was moved, and Mr. Willett was begged to furnish copies of his paper for publication, which was carried unanimously, and the meeting adjourned.

CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

A special meeting of the Exchange was held March 2. The meeting being called to consider a number of proposed amendments to the by-laws. By the amendments adopted, memberships become transferable. Instead of memberships being as heretofore in the firm name they must now be in the name of some one individual, and it is necessary for firms to at once notify the secretary of the person in whose name they wish their membership to stand. This name is transferable on the firm's order at any time free of expense. The amendments also admit the issuing of trading cards which are issued upon the firm's order to any and all employes upon payment of an annual fee of \$2.00, in advance. The membership of the Exchange is now 525, and the membership fee is \$50.00. When the number of members reaches 600 this fee will be raised to \$300. Each

member of a firm can obtain a membership if they so desire. On retirement from business memberships can be sold to parties acceptable to the Exchange.

Plans for the material enlargement of the Exchange rooms were considered and adopted, and the work of alteration will be immediately commenced.

The secretary of the Exchange is issuing postal cards to members requesting their correct address, and is particularly desirous of obtaining a complete list of the architects for publication in the Exchange handbook which is about to be issued, and architects will confer a favor upon the Exchange by sending their addresses immediately to James John, secretary of the Builders' and Traders' Exchange.

New Publications.

MONOGRAPHS OF AMERICAN ARCHITECTURE, No. V, Trinity Church, Boston, Mass.; C. D. GAMBRILL and H. H. RICHARDSON, Architects. Boston: Ticknor & Co., 1888.

In noticing an earlier monograph of this series, we spoke of the Ames memorial buildings as the most characteristic group from Mr. Richardson's studio, and hence as possessing for the architect and the student of the arts a peculiar attraction. Yet, probably the mass of people who pay any attention to architecture will select Trinity as the most admirable of all Mr. Richardson's creations. We say Mr. Richardson's creation, for while we know nothing of the distribution of work in the firm of Gambrell & Richardson, and do not question that Mr. Gambrell brought to the firm valuable qualities, yet we take it as evident from a comparison of the work of the two men, that Mr. Richardson was the ruling spirit in this case. Reasons for the popular admiration of Trinity are not far to seek. It was a new revelation to the untraveled American, used in church architecture to the prevailing forms of attenuated and half-starved Gothic, or lifeless, wooden Renaissance. But a new thing, while it can gain from the crowd a passing word of praise, cannot long hold the eye or retain the respect, even of the frivolous, unless there are solid qualities underneath the newness and glamour.

If we seek the source of the staying power of Trinity, we shall remark first, that it was a spontaneous work and came fresh from a vigorous brain. To be spontaneous, a work does not need to be unlike anything that ever before existed in heaven above or in the earth beneath. But it does need to be the bona fide expression of an idea or a sentiment that, however and wherever inspired, is unfeigned and characteristic of the man who formulates it in words or embodies it in stone. We are told by way of insinuation that Mr. Richardson sketched in southern France, and even crossed the Pyrenees and visited Salamanca. True; but Mr. Richardson also studied in a Parisian atelier, and the training there received, no doubt, had its effect on hand and eye; but it never led him to do anything bearing the most remote resemblance to the sort of thing that surrounded him at that presumably impressionable period.

The fact is, Trinity came from the heart and not from the sketch book, and this genuineness of feeling adds a felt, if indescribable, charm to the luxuriant and sense-satisfying beauty of its tower, and the seductive attraction of the cloister garth. Trinity marks a period in Mr. Richardson's development when the exuberance and somewhat unrestrained imagination of youth had not been subdued by those sterner and severer qualities that especially characterize his later work, in which the real man had wrought itself out and subjected its creations to rigorous and searching criticism. It was because of this steady progress in the path into which his early instincts led him that, in later years, Mr. Richardson came to wish that he might have the privilege of doing Trinity over again. In much we trace the same hand that we have come to know so well in his later work. But we are quite sure that, if, in Trinity done anew, the Copley Square front had not received a radically different distribution of parts, it at least would have been detailed in a very different manner. Indeed, the main difference between Mr. Richardson's earlier and later work is in the application and working out of detail, though he also grew steadily in his application of the value of strong and simple masses. And it is these two things that give his work that rugged severity which is stern without being brutal, and is, withal, lightened and enriched with fitly-placed and aptly-designed detail. Yet the very simplicity and self-control, which are indeed essential to all great art, are so emphasized in Mr. Richardson's individuality, that in his later works they have deprived him of the full sympathy of the majority of the architecture-loving of the American people, so that it is common to hear concerning many of his late designs more expressions of respect than of delight. We venture the prophecy that the American people, as they grow older, will grow toward a greater appreciation of Mr. Richardson's vigorous and virile massing, while it is not unlikely that they may demand a more unsparing use of ornament and a lighter treatment in some classes of building. A combination of these qualities would have added to the just proportions and dignity of his later work somewhat of that charm that renders Trinity, in spite of its faults, an unailing delight.

The Trinity Monograph contains twenty-three plates of faultless execution; the first being a reproduction of a photographic likeness of Mr. Richardson, and the fourth a beautifully gotten-up helio-chrome view of the apse and tower from the southeast.

Mosaics.

THE Bruschke Furniture Company are arranging showrooms for the exhibit and sale of wood mantels, in connection with the mantel and grate house of Riley & Co., on Wabash avenue. The entire second floor is occupied as a showroom and has been handsomely arranged for the exhibition of designs in wood mantels. The Bruschke Furniture Company was founded by Mr. R. Ricke about fifty years ago and long known under the firm name of Bruschke & Ricke, and represents the oldest concern in the furniture business in Chicago. Since the demand for especial excellence and elaboration in interior finish has increased, as it has in the

last decade, this concern has become known to architects throughout the South and West as reliable contractors for this class of work.

It will probably be interesting to fitters, architects, builders, etc., to learn that the Gurney Hot Water Heater Company, of Boston, have been awarded the gold medal at the Massachusetts Charitable Mechanics' Association, recently held in Boston, and also at the American Institute Fair in New York, for excellence of house heating apparatus. It will be remembered that the Gurney heater is especially designed for heating private dwellings, offices, public buildings, conservatories, etc., by hot water circulation. The fact that this heater has made such rapid strides to the front speaks volumes for its popularity and utility, and all interested in building are recommended to procure one of the company's illustrated catalogues.

The St. Louis Hydraulic-Press Brick Company have just issued a handsome illuminated catalogue for 1888, fourteen pages of which are devoted to illustrations of molded headers, returns and stretchers, and nine pages to details showing fronts, arches, cornices, piers, mullions, oriel windows, etc., taken from constructed work of several prominent architects utilizing the company's manufacture. The catalogue is introduced by the reproduction of an extensive description of the company's works, which appeared originally in the Supplement of THE INLAND ARCHITECT of January 1, 1887, embellished with ten notable buildings, in which the company's product was largely used, namely: The Insurance Exchange building, First National Bank building, Montauk block, Illinois Bank building, Calumet building, Pullman office building, Commercial Bank building, Phenix Insurance building, all of Chicago; and Ryan's Hotel building, of St. Paul, and West's Hotel, Minneapolis. The *finale* of the catalogue comprises seven photogravure plates, showing the six different plants of the company in St. Louis, and one giving an interior view showing a mammoth press at work making molded brick. It is one of the most complete and elegant catalogues issued this year by brick manufacturers, and aside from its utility in aiding the selection and ordering of pressed and molded brick, its typographical and pictorial features makes it worthy of a place in the library of every architect.

The Girard building, Nos. 298 to 306 Dearborn street, the property of J. T. Dale and S. E. Hart, which was destroyed by fire in January last, has been rebuilt according to plans and under superintendence of Thos. Hawkes, architect, and has been entirely remodeled, fireproofed throughout; all columns, girders, beams and posts are protected by porous, hollow tile, and the ceilings fireproofed with wire lathing on iron furring. The floors will be laid with asphalt; the ends of girders resting on walls are carried in iron shoes so that they could, in the event of fire, fall out or be removed without affecting the walls; these beams are also anchored through to face of wall, making the new construction additionally strong, while the old work retained has been materially strengthened and improved in many respects. There will be rapid elevator service, also freight elevators. The building is being rapidly pushed to completion, and will be ready for occupation by May 1, when the Western Bank Note and Engraving Company take possession of the third, fourth and fifth and part of seventh floors, with their office on the second floor. The Dearborn street front is treated in an original manner, being arched on the fifth and sixth stories. Two bay windows running up the sixth story, made of iron, brick and terracotta, add to the effect. The stone-course at the top of seventh story, forming window caps, is very solid. The materials used for front are St. Louis pressed brick and ornamental panels of same, terra-cotta, raindrop of Marquette stone, the entire front presenting a handsome appearance. The building has good plumbing and ventilation, well-lighted staircases and halls, and plenty of steam power, and will, no doubt, speedily fill up with good tenants, and we welcome the improvement and wish good luck to the owners, who, having so speedily rebuilt after their disaster, are to be congratulated. They have named it the "Girard building."

The Henry Dibblee Company, of Chicago, a concern that has held for years a leading position among the designers and dealers in mantels and grates, have made important changes in its officers and directors. The president is Charles H. Morse. Anson S. Hopkins, who, through his long connection with the house, has acquired an almost national acquaintance among architects and owners, and is universally popular as a business man, and for his artistic knowledge, is vice-president and general manager, and J. G. Sanborn is secretary and treasurer. The directors, like the officers, are well known in the business world, and include, with President Morse and Manager Hopkins, O. S. A. Sprague, C. T. Whitgreave, Henry Dibblee, A. C. Bartlett and Brayton Saltonstall. The showrooms of the concern, always tastefully arranged for the exhibition of everything pertaining to the hearth and its environments, are at present especially attractive. On either side of the long room devoted to wood mantels, each curtained off by itself, has an air of "choice exclusiveness," which is fully borne out by the exquisite designing they display. The first impression is that they are new, thoroughly new, and thoroughly good. In fact, there are a dozen or so designs that are so broad in their departure from all stereotyped forms that they give one that keen sense of pleasure that a thoroughly original and artistic work of art is sure to create. He is a brave designer, and an artist as well, who will abolish from a mantel all ornamentation but a few bits of most delicate carving, and instead of brackets and pendants, curves and columns, show the plain surface of the polished wood with no ornamentation but its own beauty, forming a door to a cabinet for curios or for books on each side of the mantel shelf. And still the designer has violated no principle of art, and shocks no sense of artistic worth by an incongruity. But these mantels cannot be described. Architects visit this showroom and go away convinced that it is safe to leave the designing of their mantels in the hands of Mr. Hopkins, and his assistants, whenever the rush of other work will not allow sufficient study to be given to this important branch of interior finish by the office force. Being the western agents for Low's tiles, and dealers in all that is best and latest in fireplace furnishings, aids this company to give to the architects of the West the best in their line that the art and industry of the country can produce.

Railroad Notes.

THE first fishing party to the popular resorts on the lakes near Antioch, Ill., on the line of the Wisconsin Central Railway, reports the sport exceptionally good. The ice left the lakes ten days since.

THE Wisconsin Central Railway, in connection with the Northern Pacific Railroad and other lines, have arranged for a series of excursions to the principal land points in Minnesota and Dakota, at the rate of one fare for the round trip. These excursions will start on Tuesdays, fortnightly, beginning with March 20 and continuing until June 19.

THE Missouri Pacific Railway and Iron Mountain Route will run semi-monthly excursions to Texas and Arkansas on the following dates: April 4 and 25, May 9 and 23, and June 6, at one fare for the round trip. These tickets will be sold to all points in Arkansas and Texas, and will be good for sixty days for return trip, and fifteen days will be allowed for passage in each direction, with stop-over privileges.

THE Missouri Pacific Railway will also run low-rate excursions to all points in Kansas and Nebraska, forty miles west and south of Missouri river points, at one fare for the round trip, on the following dates, namely, April 3, 4, 24 and 25; May 8, 9, 22 and 23, and June 5, 6, 19 and 20. These tickets are good for thirty days, and ample stop-over privileges are allowed. Ticket offices, 102 North Fourth street and Union Depot, St. Louis.

POPULAR excursions have been inaugurated by the "Monon Route," Louisville, New Albany and Chicago Railway to the South, taking in most of the southern cities, to Tampa, Florida. The rate for the round trip is the regular rate one way. These half-rate excursions are made upon fully equipped Pullman cars, and occur April 9 and 23, tickets being good for thirty days. Information and tickets may be obtained at the city ticket office 73 Clark street, at any of the hotels and the depot.

THE hunting and fishing season has commenced, and the favorite sporting resorts along the Wisconsin Central are crowded with visitors. To accommodate this traffic the summer tourist rates will go into effect April 15. The round-trip rate to Cedar Lake will be \$2.00; to and from Fox Lake, including stage and steamer tickets, \$3.00. Ten-ride round trip books to Fox Lake will also be issued at \$14. A similar low rate will also be made to Antioch, which is soon to become the most popular resort in Lake country.

Trade and Building Prospects.

OFFICE OF THE INLAND ARCHITECT, April 10, 1888.

The characteristic of manufacturing, building and commercial activity at this time is conservatism. This is the natural outcome of influences which have been converging for the past two years. The spirit of organization seems to permeate every interest, and in that growth or expansion lies the power to control, restrict and direct the energies on all sides. There is an underlying apprehension in business circles that there is danger of overdoing. Hence everywhere is seen organization and restriction. Already the effect of this is seen in steady and even firm prices in several lines of production. The spread of organization has accomplished much good in enlightening producers as to the extent of markets to be supplied, and the extent and capacity of the facilities existing for that purpose. Depressions have in times past overtaken the country, because there seemed to be no power in society, or in the world of business, to control and direct or conserve its own power and energy. Production once set in force has, in times past, run its course until the climax of expansion was reached. So of speculation. So of financial stringency and also of credits. Enterprise blindfolded herself and rushed forward, refusing to see or hear, and the end was the gorging of the channels of production, the lowering of prices, the obstruction of trade, and the virtual destruction of industries, and a general and sweeping transfer of values from debtor to creditor. Business, production, money, exchange, and all the great agencies and activities are now better understood and under better control, and hence panics are less probable. The increase in the volume of money, and its distribution in reproductive channels all over the country, saves us from evils that but for this distribution would ensue. In short, the people are guarded against evils and accidents as they never were before.

The indications at this time are that capital will as eagerly seek investment this year as last, that speculation has gained some advantages through the combinations of capital it did not have a year ago, that the expansion of productive capacity in mills, factories and shops will be made with greater care than during the past year or two; that the present downward tendency in prices in several branches of trade will not cause a further restriction of production, and that the demand for homes, offices, buildings, churches, schools, and construction work in general, will not fall below the limit reached last year. In some lines there will be a falling off; but new work, especially of an engineering kind, will increase, and compensate for deficiencies in other directions. Railroad companies will expend fully as much money this year in bridges, roadbed, locomotives, cars, stations and extensions, and shop equipments. Fully as many small houses will be erected this year throughout the United States. Manufacturing capacity in general will not be enlarged to the extent it was last year. Iron and steel makers have less to do, and a restriction of output is now in progress west and east. The southern iron interests have not yet felt this influence. Coal production will be kept at its full limit. Hardware manufacturing interests will continue to prosper. Wood-working machinery makers will have about as much to do. Lumber manufacturers are intending to market as full a product as last year, and count on strong and steady prices. Manufacturers of house-building material, of almost every kind, have contracts in hand that point to the possibility of steady work throughout the season. There will be a minimum of labor agitation. Our advices from New England show that last year's conditions will be repeated. The industrial activity there is directly reflected in building activity. Throughout the intervening states there is general activity in building and manufacturing enterprise. Investors feel the necessity of caution, but they recognize that the limit of safety in building activity has not yet been reached. The West and the South are creating requirements at a rate that assures steady activity in all industries contributing to development and progress in those great regions. With an abundance of money, and the maintenance of a healthy competition between all related interests, there is no room for fears of depression or of overproduction, or of an inability on the part of the masses of the people to continue the enormous consumptive demand which has placed our business and manufacturing interests on such a stable foundation.

Synopsis of Building News.

Alma, Wis.—Architects Edward V. Koch & Co., of Milwaukee, have prepared plans for Buffalo county for a brick court house, to cost \$20,000; contracts will be let April 16, 1888; Ed. H. Wailty, county clerk.

Americus, Ga.—Architects Bruce & Morgan, of Atlanta: For Baptist Society, frame church building, 45 by 75 feet; cost about \$10,000.

Atlanta, Ga.—Architects Bruce & Morgan: For David Meyer, block of tenements, 75 by 84 feet; cost \$15,000.

Ashland, Wis.—Among the contemplated improvements is the erection of the Ellis Opera House, to cost about \$60,000. The Ashland National Bank will build a three-story brick block, to cost about \$50,000. Thomas Bardon and W. M. Tompkins intend building large business blocks this season. E. A. Shores will build a residence to cost \$35,000. E. C. Smith will build a three-story brick block, 25 by 75 feet, Milwaukee brick, brownstone trimmings; cost about \$10,000. Both the Hotel Chequamegon and the Colby House will undergo remodeling and refitting at an early date.

Bay City, Mich.—Present outlook very fair.

Architect D. P. Clark reports: For F. E. Bradley, two-story frame barn, 50 by 32 feet; cost \$2,500. For Flynn & Mosher, seven one and one-half story cottages; cost \$5,250; under way; also remodeling several frame residences at a cost of \$1,200 to \$2,000 each; projected.

Breda, Iowa.—Architect Schnell, of Rock Island, Ill.: For Catholic Society, brick church building, 100 by 60 feet; cost \$14,600; work to be commenced at once.

Butler, Mo.—Architect A. B. Cross, of Kansas City: For Butler National Bank, three-story brick, stone and terra-cotta bank building; cost \$25,000.

Cassville, Wis.—Architect F. D. Hyde, of Dubuque, Iowa, reports: For John A. Kundi, two-story brick residence, 32 by 42 feet; slate roof; cost \$3,500; plans under way.

Charleston, Ill.—Architect W. W. Boyington, of Chicago: For J. H. Johnston, business block, to cost about \$20,000; plans under way.

Chicago, Ill.—The building season has seemed rather backward as far as actual work is concerned. This is not due to any lack of business in projected work among the architects, but largely because of a certain amount of nervousness among architects and owners in regard to possible building strikes, the experience of the past two years making this quite natural; but as far as the closest observation and a thorough knowledge of the elements involved and present condition of the trades can show, this danger is purely imaginary. The painters have tried to make trouble by an abortive attempt to force an unjust standard of wages upon the employers, but have gained nothing but the loss of what little work has been started, there being a large surplus of unemployed painters to fill the present demand. The main cause of apprehension has come from the carpenters, or those who claim to represent them. These two or three agitators, with which the city has been cursed, and by whom the carpenters have been misled and damaged in the past, still try the old plan of agitation, but this year with little success. The best men have been employed all winter at wages satisfactory to themselves, and while no rate is established, fair mechanics are in such demand that there is little chance for dissatisfaction. This and the determination of the carpenter contractors to pay good wages to good men, and manage their own business in their own way, which is a strong and unanimous feeling among them, leads us to state that this will be a year of uninterrupted work. There will be no "boom" in building, but the contractors can be sure of a fair amount of business, and safely figure upon it being carried out without serious interruption from strikes. In fact, as one prominent contractor expressed it, "Strikes are a chestnut."

Architect William W. Clay: For E. F. Daniels, brick and stone residence, hardwood finish; cost \$20,000. For S. W. Lamson, two-story and attic and basement, brick residence, 34 by 60 feet; cost \$15,000. For J. J. Maloney, two-story stone-front flat building, 25 by 70 feet; cost \$6,000. For E. H. Turner, two-story and attic and basement residence, 30 by 60 feet; cost \$12,000. For J. H. Baker, alterations; cost \$5,000.

Architects Cobb & Frost have prepared plans for remodeling a block of five three-story and basement residences, 125 by 50 feet, into an apartment house, at a cost of \$30,000. For the W. S. Johnson estate, two-story store, 54 by 64 feet; cost \$7,000.

Architects Flanders & Zimmerman: For John Berry, one-story iron and glass stores, 100 by 75 feet; cost \$10,000.

Architects Wilson, Marble & Lamsen: For J. W. Ferwald, two-story store and flats, 25 by 62 feet; cost \$4,200. For L. S. Smith, two-story and basement residence, 24 by 55 feet; cost \$6,000. For A. Delfosse, three two-story brick dwellings, 67 by 50 feet; cost \$14,000. For E. Fournau, two-story brick addition; cost \$2,500.

Architects Treat & Foltz: For William Chalmers, two-story and basement frame residence; cost \$12,000. For G. W. Taylor, two-story frame dwelling, 22 by 70 feet; cost \$4,000.

Architects Starbuck & Ackermann: For J. C. O'Connor, three-story brick and stone stores and flats, 40 by 40 feet; cost \$10,000. For F. Sawyer, stone-front store building, to cost \$10,000.

Architect R. G. Pentecost: For T. J. Leonard, three-story brick and stone stores and flats, 65 by 65 feet; cost \$15,000.

Architect Jno. F. Warner: For Beckwith & Fleming, two-story brick, stone and terra-cotta flats, 75 by 84 feet; cost \$18,000. For Mrs. E. J. Sheridan, two-story stone front residence, 33 by 60 feet; cost \$10,000.

Architects Ostling Bros.: For P. J. Hawkinson, three-story brick and stone flats, 23 by 72 feet; cost \$12,000. For H. H. Bischoff, two-story brick and stone flats, 48 by 54 feet; cost \$8,000. For C. Olson, three-story flats, 24 by 60 feet; cost \$7,000.

Architect C. A. Weary: For Mrs. Prettyman, two two-story brick and stone dwellings, 44 by 66 feet; cost \$12,000.

Architect S. M. Randolph: For the United States Transfer Co., two-story brick warehouse; cost \$10,000.

Architect J. F. Doerr: For R. Schmidt, two three-story brick and stone dwellings, 32 by 60 feet; cost \$12,000.

Architects Bauer & Hill: For Thomas Burke, three-story flat building, 24 by 88 feet; cost \$12,000.

Architect Fred Aldschlager: For Baptist Society, stone front church building, 65 by 90 feet, Paulina and Superior streets; tower 125 feet high; cost \$30,000.

Architect John Otter: For Louis Olcese, four-story and basement flat building, 25 by 43 feet; pressed brick and stone; cost \$8,000. Also has plans for a two-story frame hotel, 100 by 100 feet, to cost about \$10,000.

Architects Schaub & Berlin: For Charles Byer, two-story and basement residence; cost \$4,000. For E. Beyghe, two-story and basement flat building; cost \$5,000.

Architect W. A. Arnold has plans for the brick and stone M. E. church, 60 by 95 feet, to be erected on West Jackson street, at a cost of \$22,000.

Architect A. J. Thain: For M. Deuer, four-story brick factory building, 60 by 125 feet; cost \$20,000. For B. F. Paine, residence, 28 by 45 feet; cost \$5,000.

Architect Julius Speyer: For J. Frolich, three-story and basement laundry building, 50 by 92 feet; cost \$20,000. For S. Carey, three-story store and flats, 25 by 60 feet; cost \$7,000.

Architect Wm. Longhurst: For Charles Wilson, two-story store and flats, 24 by 50 feet; cost \$4,000.

Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall: There is absolutely nothing to report in regard to trade notes, consequently there is no use of spinning the yarn until it breaks and spoils the knitting. On the 31st of this month (March), the Centennial Exposition Buildings will be dedicated. The contractors have made \$100 per day by their promptness in turning over the immense structures sixty days before the time specified in contract.

The report of Building Inspector Forbush for the month is very satisfactory, there having been 116 permits issued to the value of \$216,483, which netted the city \$438.90. Our new building law has come to stay, and is really becoming popular.

S. S. Godley, formerly with the Syenite Granite Co., has opened an office in the Mitchell building, and as virtue has its own reward, we can safely promise him a good business.

Architect Thornton Fitzhugh, who has succeeded to the business conducted by Forbush & Green, has his time well employed and reports the following: For Geo. Fox, Esq., a picturesque frame house of eight rooms, pine finish, shingle roof; cost \$4,000. College building at Oxford, Ohio, to be built of brick, four stories high; will contain libraries, dormitories, hall, music rooms, etc., and laundry in the basement; size 50 by 60; cost \$10,000. For D. V. Walker, Wichita, Kansas, a house the same as the one first described. Prospects very bright.

Architects Samuel Hannaford & Sons report the following: Remodeling building for B. & O. Express, into a first-class office building, adding two stories, elevators and all modern improvements. For Thos. L. Griffith, a brick and frame shingled house of ten

rooms, pine finish and slate roof. For Mrs. Mary A. Wolf, a pressed brick house of twelve rooms, pine finish and tin roof. For Miss Agnes A. Collier, Avondale, Ohio, a frame house of eight rooms. This house is quite artistic and a cheap house for the money.

Architect S. E. Des Jardins has the following plans on his boards for the persons named: Miss Mollie Williams will build two double frame houses, two and a half stories high, ten rooms each, pine finish, slate roof; cost \$15,000; contracts let. Charles F. Louden will build a residence of the following description: pressed brick and brownstone in first story, frame covered with tiling in second story, hardwood finish and slate roof; the house will contain about twelve rooms, and cost \$12,000. For Mr. Wm. Hillebrand, a double pressed brick house of sixteen rooms; the house will be finished in pine, with slate roof; cost \$10,000. J. H. Steggeman, of Newport, Ky., will build a frame residence of twelve rooms, slate roof, hardwood finish, and to cost \$12,000. Mr. Des Jardins is improving decidedly in his treatment of house plans, and is acquiring a bold and original style that is bringing him increased business.

Architects Buddemeyer, Plympton & Trowbridge: The artistic feeling which is preeminently shown in all of the buildings, especially country residences, has brought this firm their full share of work. They have the knack of giving a good deal for a little money. Under their plans the following houses will be built for the parties named: Peter G. Thomson will build four houses, each half timber and frame, containing eight rooms each, with slate roof. Mrs. P. G. Thomson will build a residence of eleven rooms, entirely of half timber work, with slate roof; all of these at College Hill, Ohio. T. W. Keeney, row of six brick houses, three stories high, each containing twelve rooms, with tin roof. Miss Anna J. Lynch, residence of nine rooms, of half timber work, and shingle roof. F. M. Joyce, residence of nine rooms, half timber and slate roof.

Edward Johnson, residence of ten rooms, half timber work, with gambrel roof, etc. Henry Becker, brick store, three stories, with iron front and tin roof; size, 15 by 48 feet.

Denver, Col.—Architect Fred A. Hale: For Rev. E. H. Kriege, residence, to cost \$4,000; L. M. Bilter, contractor.

Architects Wilson & Robinson have let the contract for the erection of a residence for Mrs. Z. Shed, to cost \$4,775; J. S. Buell, contractor.

Architect O. Bullow: For *Republican* Publishing Co., remodeling offices and counting room. For W. H. Harvey, residence; 40 by 80 feet; cost \$14,000; Hamilton & Harvey, stone contractors; C. J. Smith & Co., brick contractors. Also preparing plans for eight dwellings to be commenced soon as new brick can be had.

Architect Wm. Lang: For Messrs. Wilson, two two-story residences; cost \$8,000. For H. C. Dillon, two-story brick residence, 28 by 50 feet, to cost \$6,000. For Mrs. Gerish, two-story brick residence; cost about \$4,500. For J. H. Clems, two brick and stone residences; cost about \$4,500 each. The Sheridan Hotel, to be erected near the military Post, will cost about \$15,000. For C. V. N. Kittredge, stone residence; cost about \$10,000. For J. W. Hampton, pressed brick residence; cost about \$7,000. Work has been resumed on brownstone residence of I. N. Large, which will cost about \$25,000, when completed.

Architects Varian & Stemer: For A. T. Brasher, brick and stone residence, 33 by 56 feet; cost \$10,000; Hamilton & Harvey, masons; Carpenter & Hamlin, carpenters. For P. L. Bockfinger, pressed brick and stone residence; cost \$18,000. For the Overland Club, club house, 60 by 100 feet; to cost about \$20,000. For C. H. Olmsted, two cottages; to cost \$4,000 and \$5,000. For D. C. Packard, residence, to cost \$10,000; plans under way. For M. W. Gano, brick and stone residence; cost \$4,000. For George Gano, brick and stained shingle residence; cost \$4,000.

Architect D. McD. Graham: For Fred Neef & Bro., four-story brick and stone business block, 75 by 125 feet; cost \$80,000; under way; John Moutal & Co., contractors. For H. S. Waldo, two brick and stone buildings, 25 by 45 feet; cost \$7,000; Lawson & Vaughan, contractors. For Gen. A. J. Sampson, two-story brick and stone dwelling, 23 by 50 feet; cost \$4,500; Barnett & Trautman, contractors. Glen Park Hotel, three-story frame building, 50 by 100 feet; cost \$15,000; projected. Montezuma Valley Hotel, three-story brick and stone building, 100 by 150 feet, cost \$5,000; projected.

Architect R. S. Roeschlaub: For P. Gottesleben, a residence to cost \$25,000; to be built of lava stone, trimmed with Las Vegas purple stone. Also has let the contract for the erection of the Hyde Park school building, 121 by 122 feet; brick and stone; cost \$70,171.

Architect A. M. Stuckert: For G. E. Hannan, residence, to cost about \$4,000.

Among the permits recently issued are the following: J. H. Richards, two-story brick dwelling, 32 by 64 feet, Sherman between Bayard and Ellsworth streets; cost \$5,000. M. C. White, two-story brick dwelling, 21 by 50 feet, Jay between Twenty-first and Twenty-third streets; cost \$4,000. G. Schwank, two-story brick dwelling, 22 by 50 feet, Tremont between Fourteenth and Fifteenth streets; cost \$4,000. M. Finnerty, two-story brick building, 42 by 100 feet; cost \$4,000. C. A. Wallace, two-story brick building, 33 by 50 feet, Eleventh between Larimer and Lawrence streets; cost \$4,000.

Dubuque, Iowa.—Architect F. D. Hyde reports: For Rev. Father Fogarty, two-story brick residence, 22 by 48 feet; cost \$3,000. Plans in preparation.

Florence, Col.—Architects Balcomb & Rice, of Denver, are preparing plans for McCandless & Robinson, for a two-story brick hotel building, 75 by 140 feet, to cost \$25,000. For Senator McCandless, a residence, to cost \$5,000.

Fredonia, Kan.—Architect A. B. Cross, of Kansas City, for First National Bank, three-story brick, stone and terra-cotta bank building; cost \$25,000.

Garnaville, Iowa.—Architect F. D. Hyde, of Dubuque, reports: For W. A. & M. F. Meger, one-story brick store, 34 by 60 feet; cost \$3,000. Plans in preparation.

Golden, Col.—Architects Varian & Stemer, of Denver, For Regis Chauvenet, president of the State School of Mines, pressed brick residence; cost about \$7,000.

Greeley, Col.—Architect Fred A. Hale, of Denver, is preparing plans for H. N. Haynes, for a residence, to cost \$6,000.

W. R. McClellan & Co., are about to erect brick and tile factory buildings.

Greenville, Mich.—Architect D. P. Clark, of Bay City. For the M. E. Society, brick and stone church building, 70 by 107 feet; cost \$15,000. Taking figures.

Hiawatha, Kan.—Architect J. G. Haskell, of Topeka. For Hiawatha College Co., two story and basement and attic, stone veneered college building, 90 by 50 feet; cost \$15,000. Contract let to W. R. Carter, of Lawrence, Kan. Work to commence at once, and building to be completed about September 1, 1888.

Independence, Mo.—Architect A. B. Cross, of Kansas City. For John Flournoy, two-story brick and terra-cotta residence; cost \$15,000.

Indianapolis, Ind.—The commissioners for the soldiers' and sailors' monument have advertised for bids for the contract to build the foundation for the monument. The bids will be opened May 1. The monument when completed will cost upward of \$300,000.

Jasper, Ga.—Architects Bruce & Morgan, of Atlanta. For Perkins county, brick and stone court house, 64 by 84 feet; cost \$15,000.

Kansas City, Mo.—Architect E. P. Brink has prepared plans for a block of houses, to be erected corner of Twenty-fourth and Chestnut streets.

Architect W. F. Hackney, has prepared plans for two brick and stone school buildings; cost \$50,000.

Architect M. J. Scholer. For John Owens, brick, stone and terra-cotta building; cost \$12,000.

Lake Geneva, Wis.—Architect A. Cudell, of Chicago, Illinois: For Conrad Seipp, two-story and basement and attic, stone and frame summer residence, 50 by 70 feet; cost \$25,000.

Laramie City, Wyo.—Architect Fred A. Hale, of Denver, Colorado, is preparing plans for the Commercial Hotel Company, for a four-story hotel building, 97 by 133 feet, Buff sandstone front; cost about \$80,000.

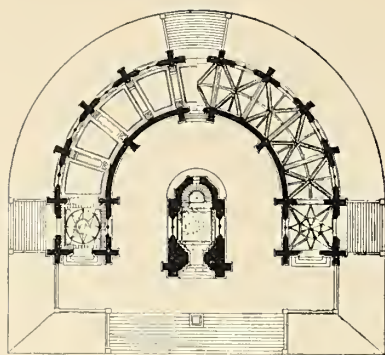
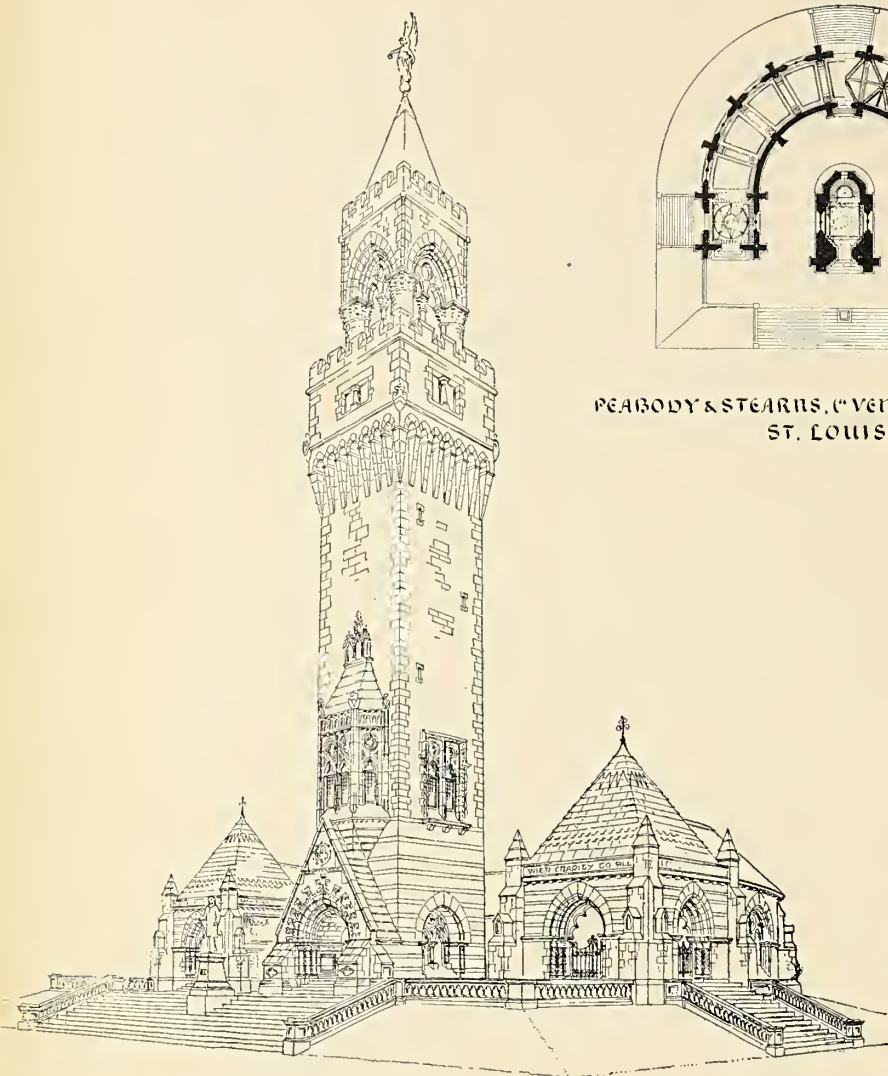
Lawrence, Kan.—Architect J. G. Haskell, of Topeka: For Merchants' National Bank, three-story brick and stone bank building, 25 by 117 feet; cost \$15,000; contracts not let.

Lincoln, Neb.—Architect O. H. Placey: For the school board, two-story and basement, brick and stone school building, 70 by 68 feet; Grace & Kelly contractors, work to be commenced at once.

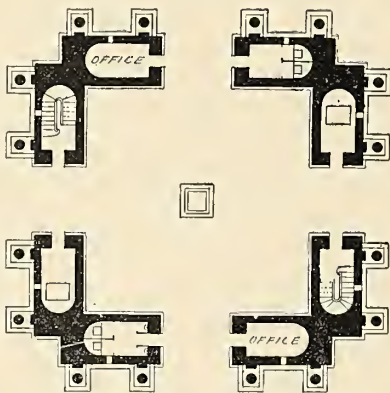
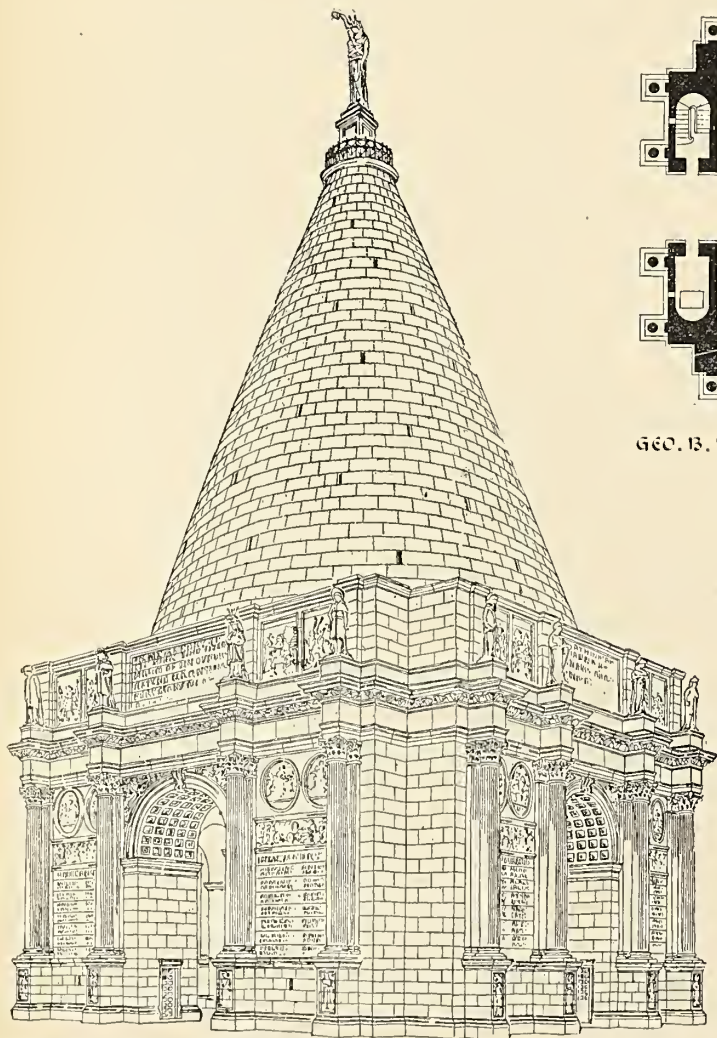
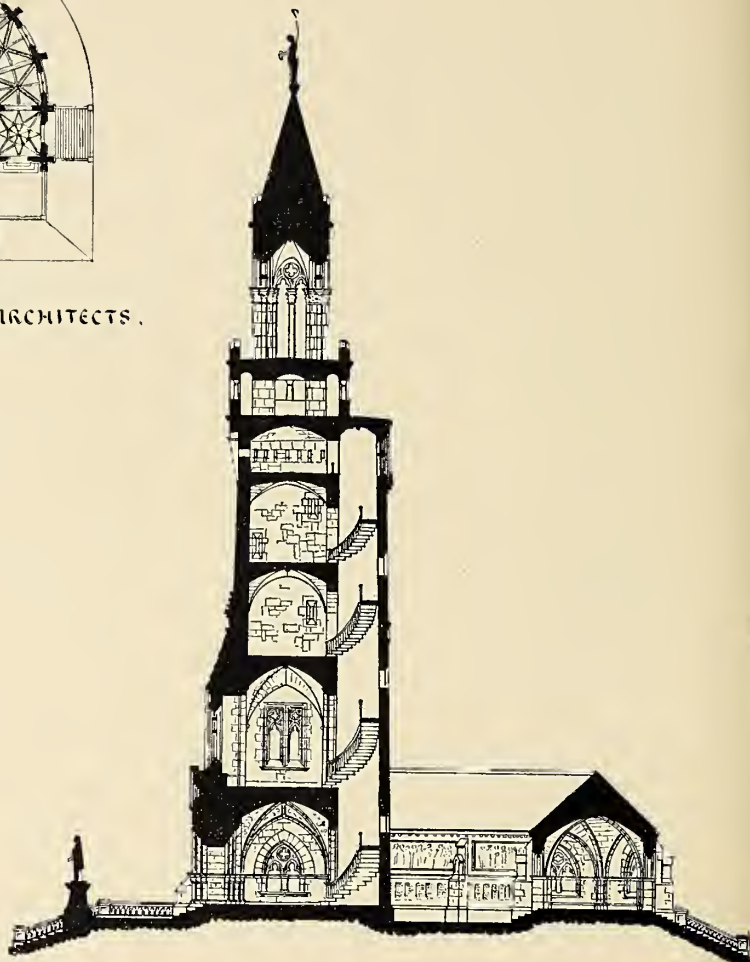
We are informed by Geo. L. Miller, manager, that the New York Life Insurance Company have not yet decided to erect a large office building as reported by some of our contemporaries.

Lloyd, Ill.—Architect Geo. H. Helmle, of Springfield. For C. W. Houghton, two-story frame dwelling, 32 by 50 feet; cost \$3,000; under way. A. T. White & Bro., builders.

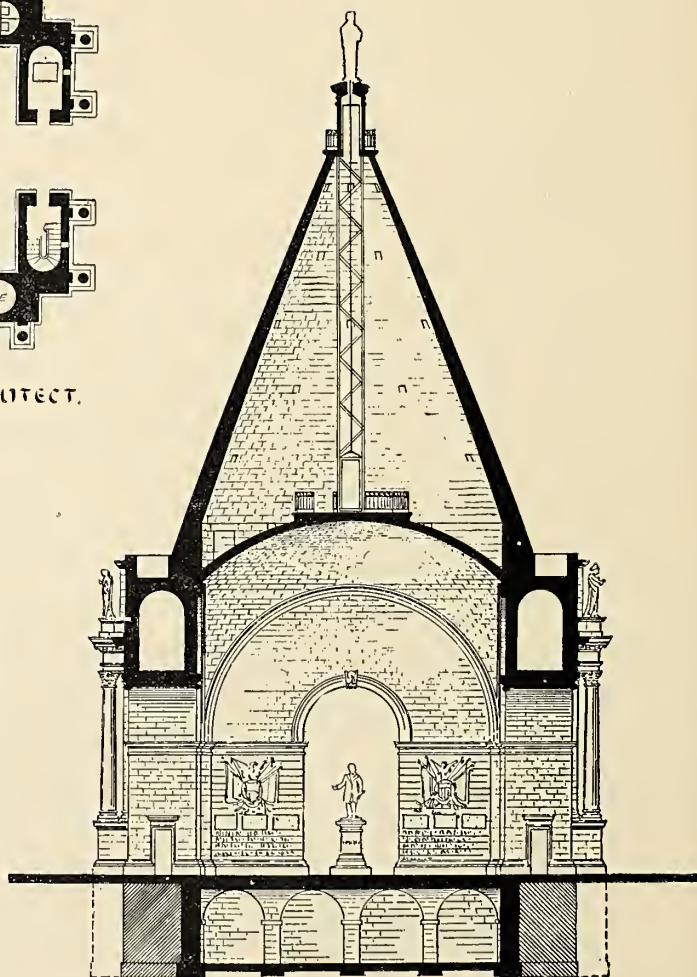
(Continued on page XIV.)



PEABODY & STEARNS, ("VENI"), ARCHITECTS.
ST. LOUIS.



GEO. B. POST, (" ") ARCHITECT.
NEW YORK.

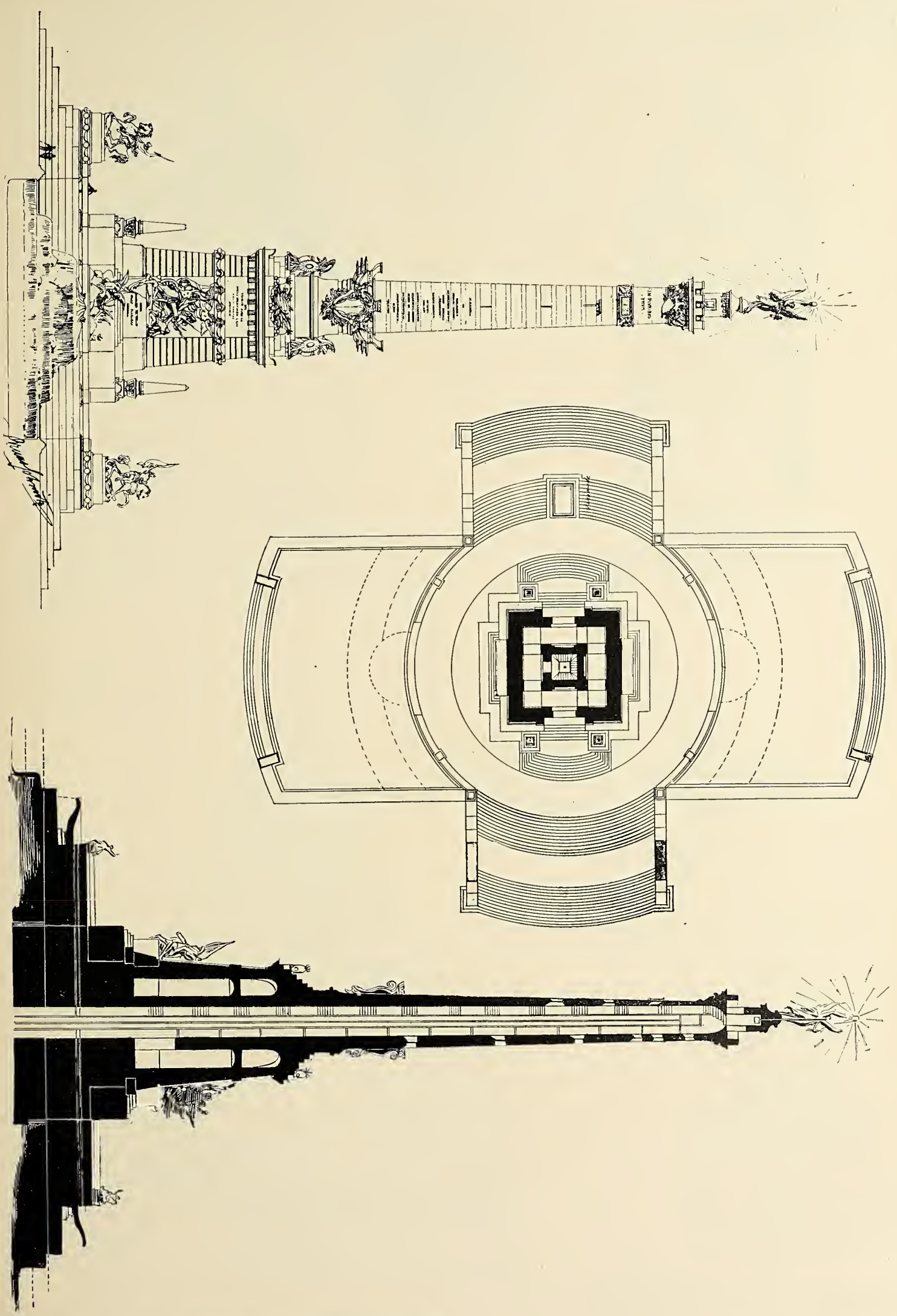




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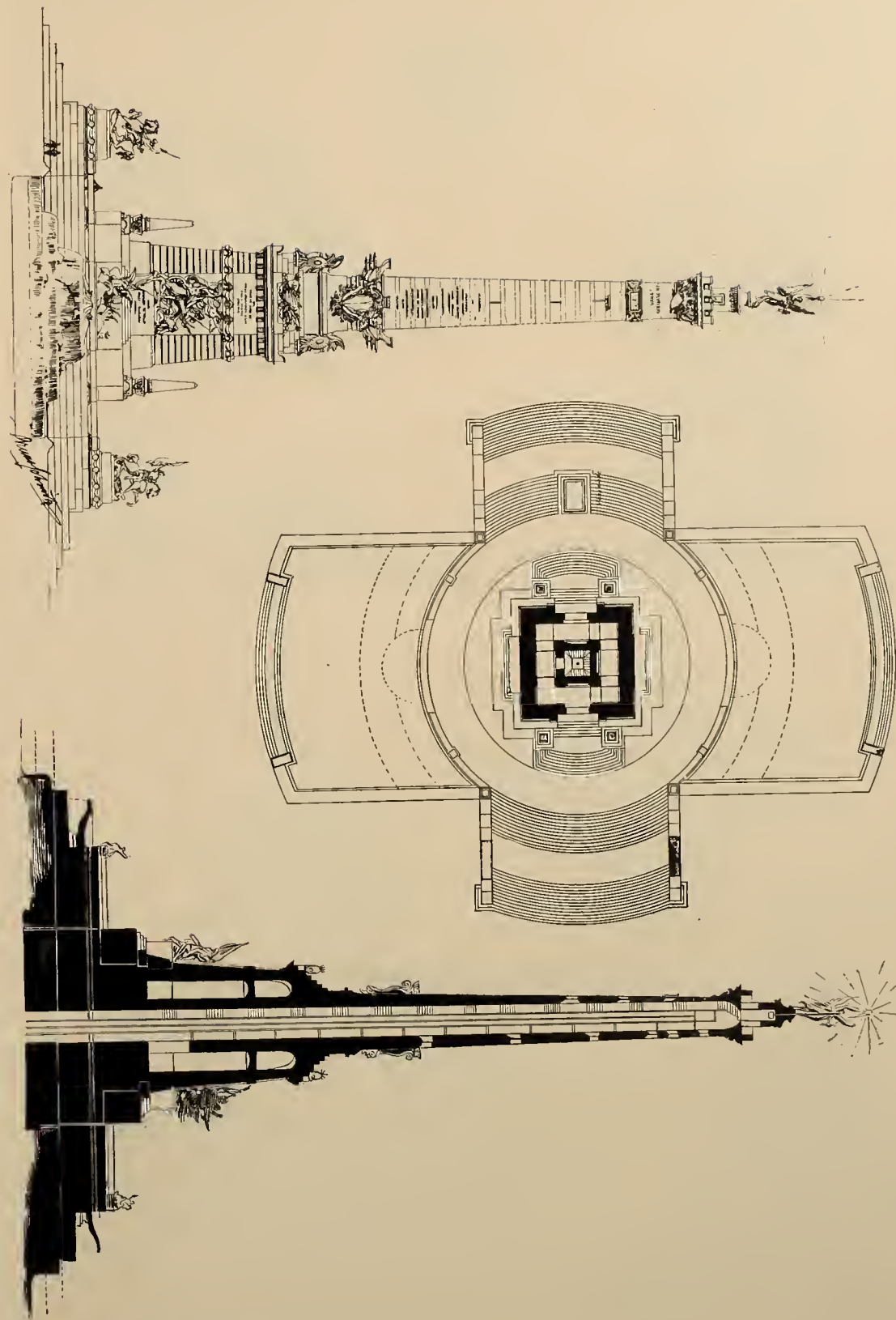
ACCEPTED COMPETITIVE DESIGN FOR INDIANA STATE MONUMENT



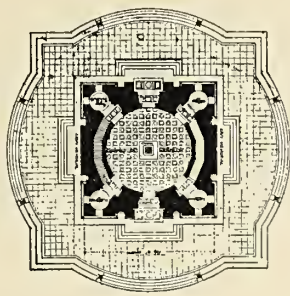
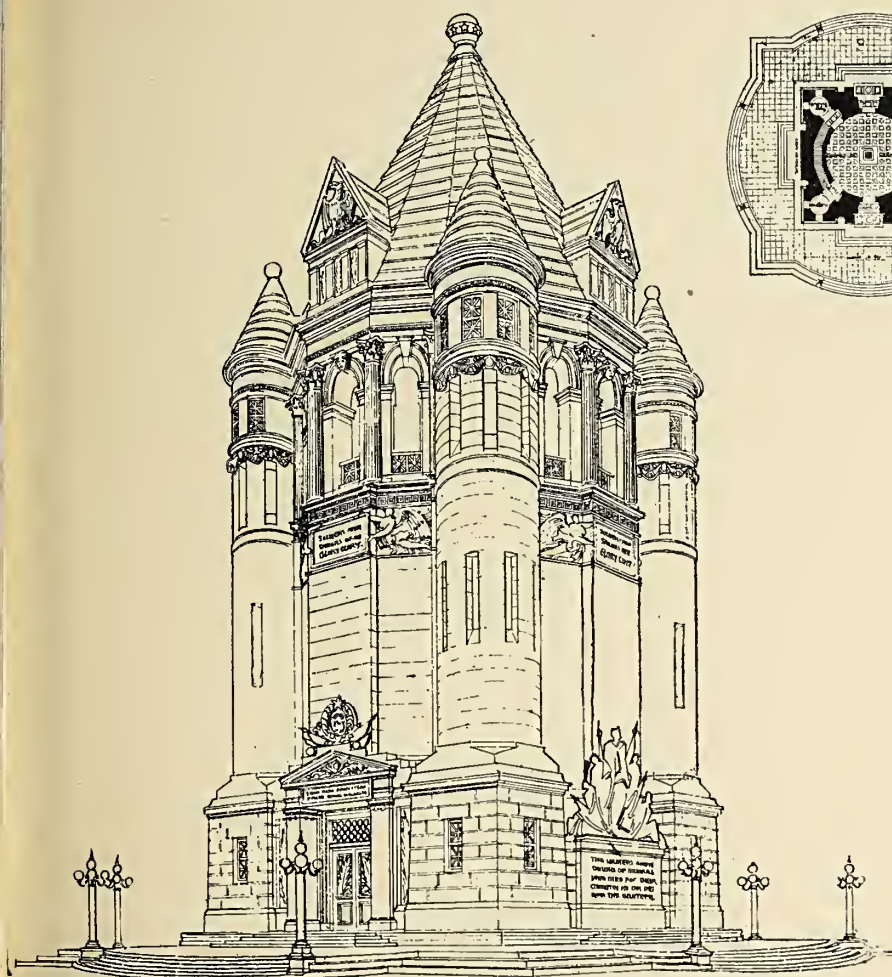
LDIERS' AND SAILORS' MONUMENT, INDIANAPOLIS.



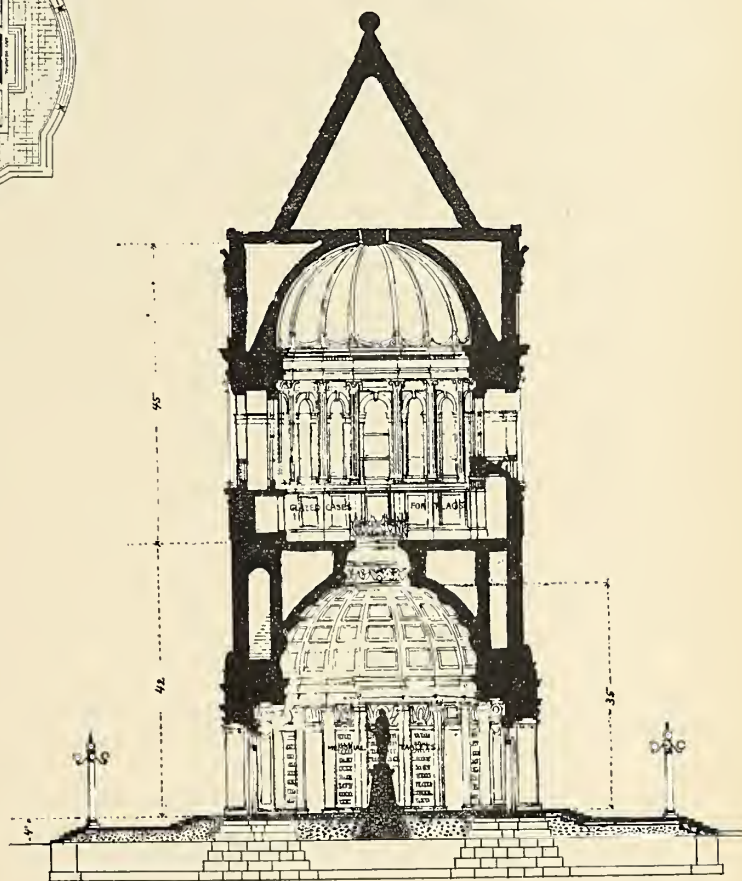
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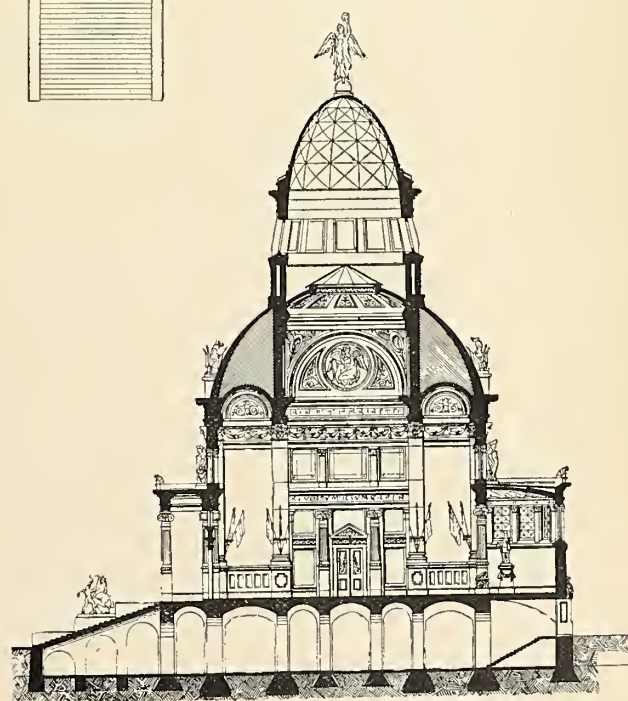
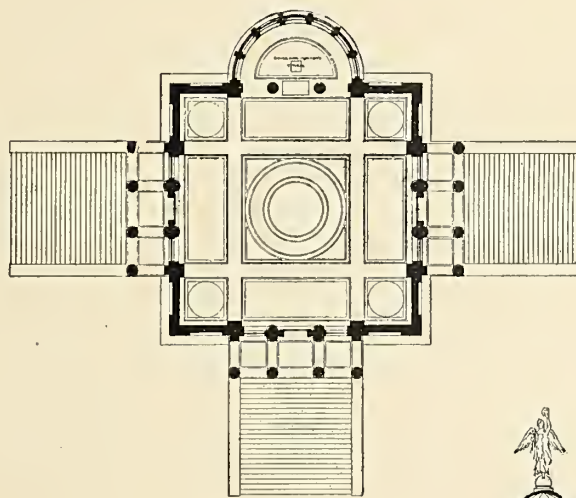
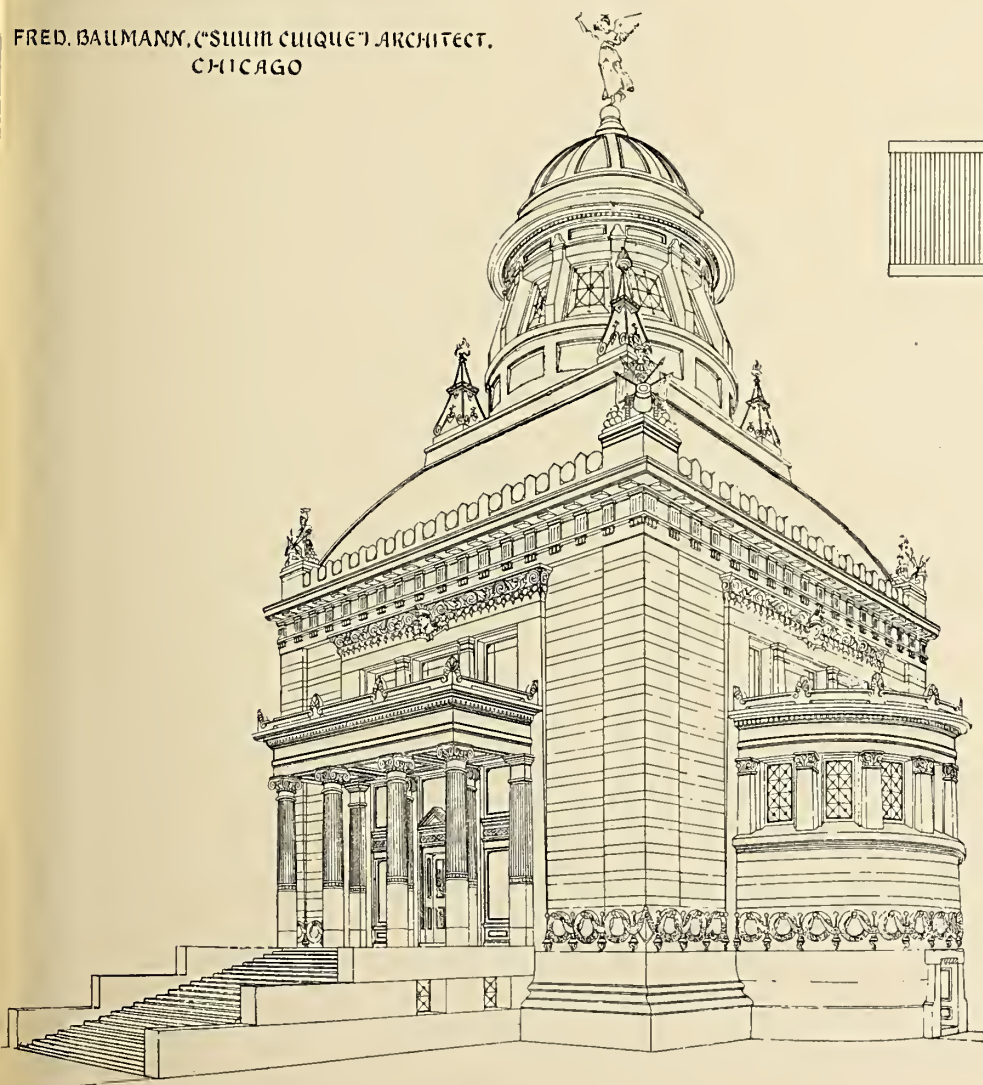
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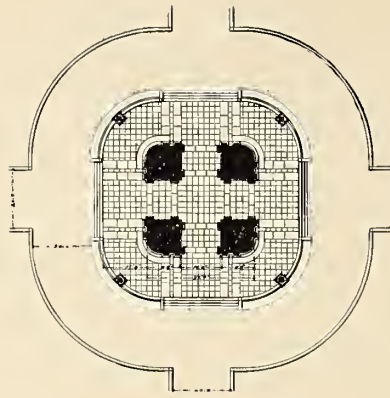
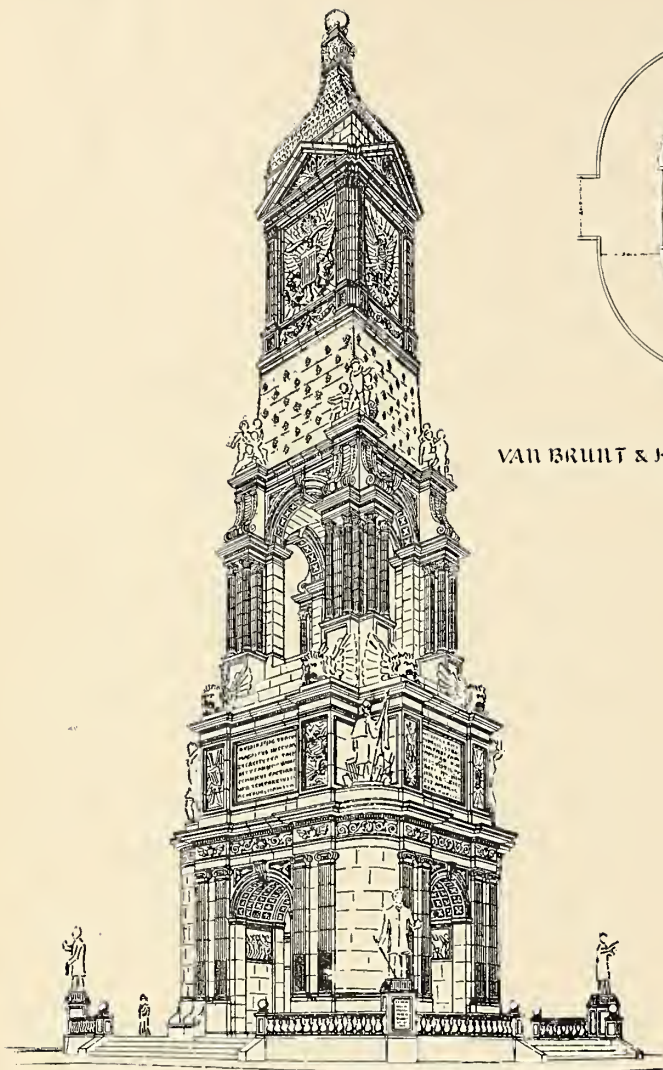
CABOT & CHANDLER, ("AD MORTEM FIDELIS"), ARCHITECTS.
BOSTON



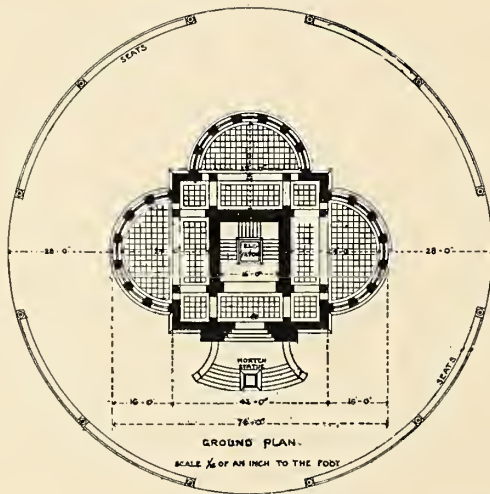
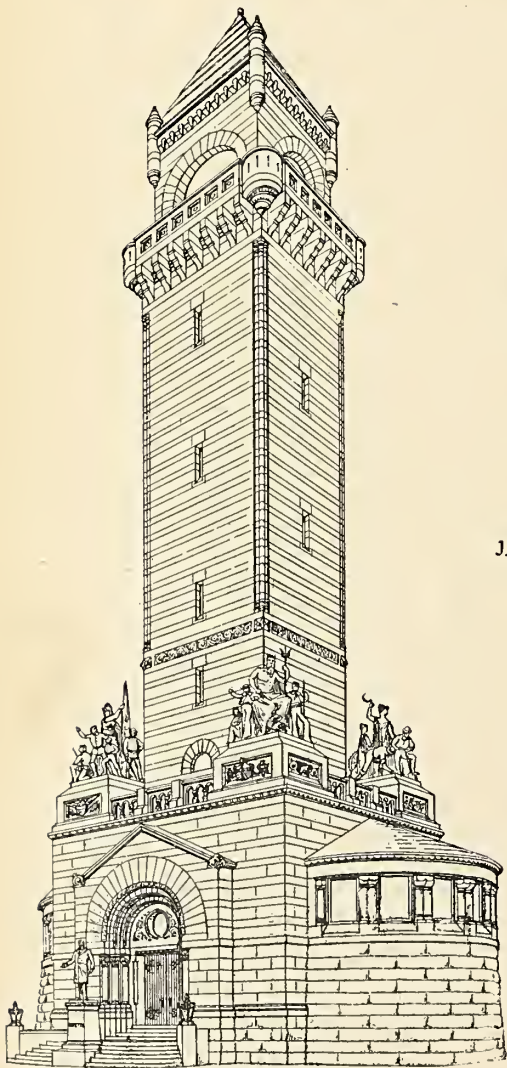
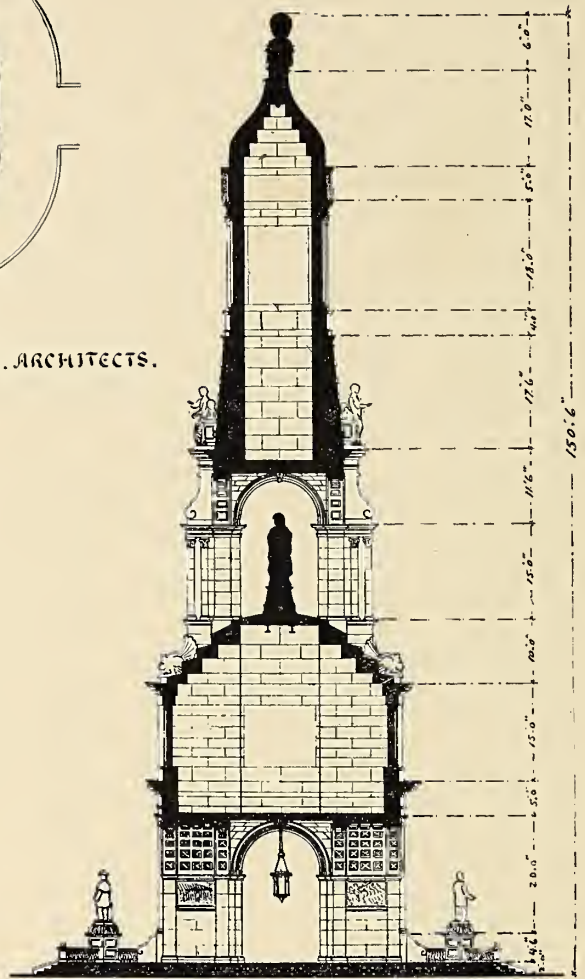
FRED. BAUMANN, ("SUIVI CUIQUE") ARCHITECT.
CHICAGO



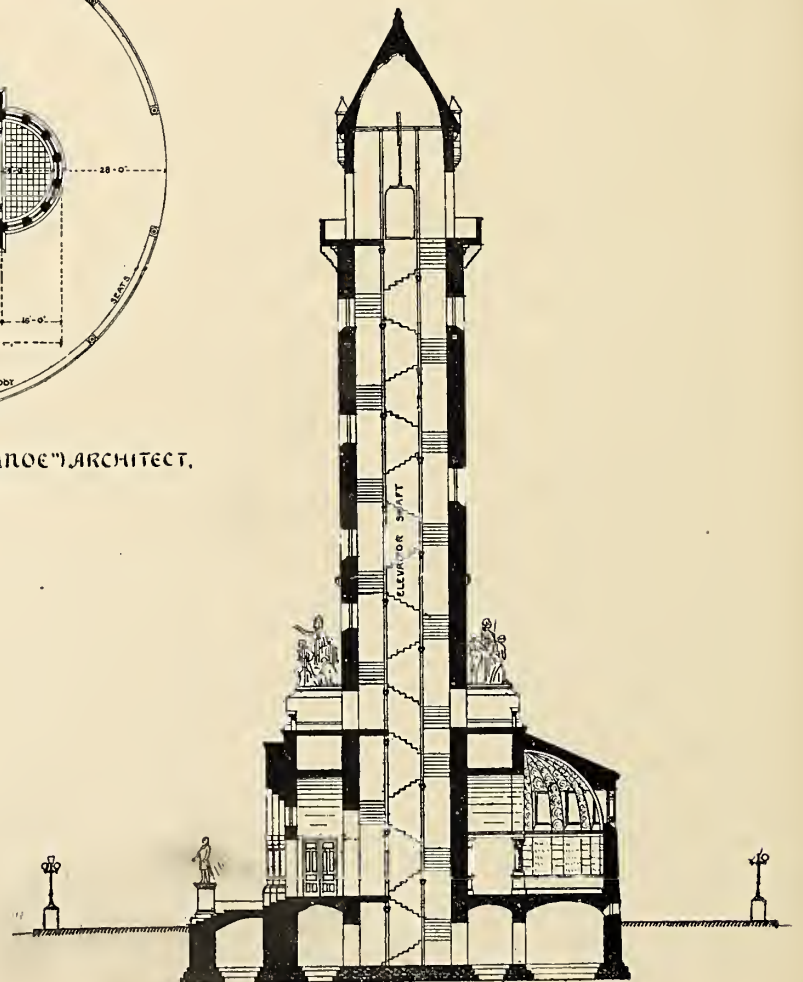
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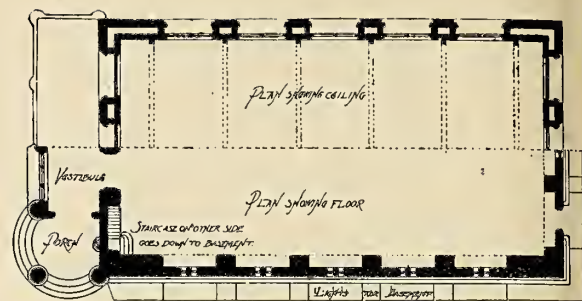
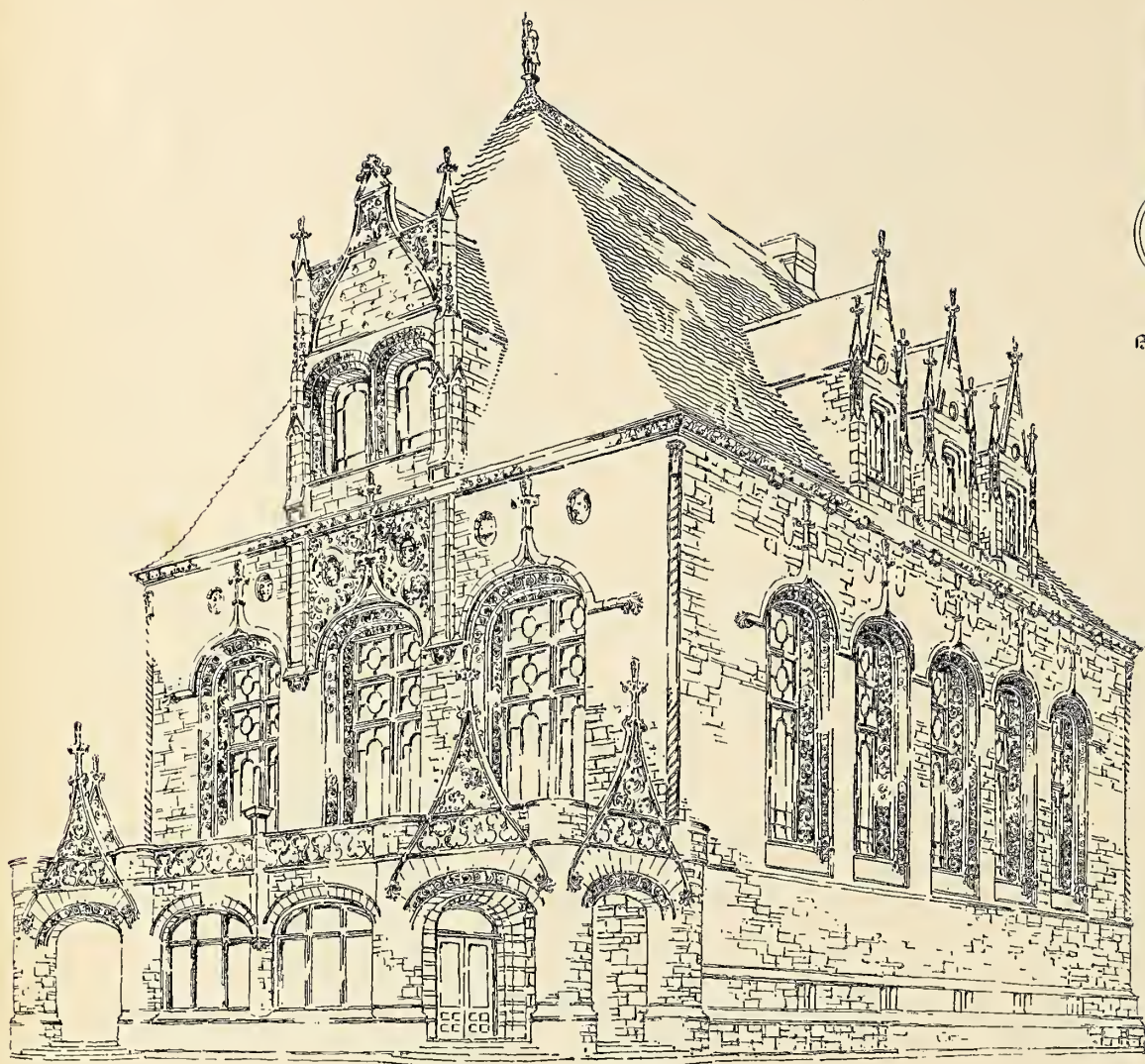
VAN BRUNT & HOWE, ("PALLADIO"). ARCHITECTS.
KANSAS CITY.



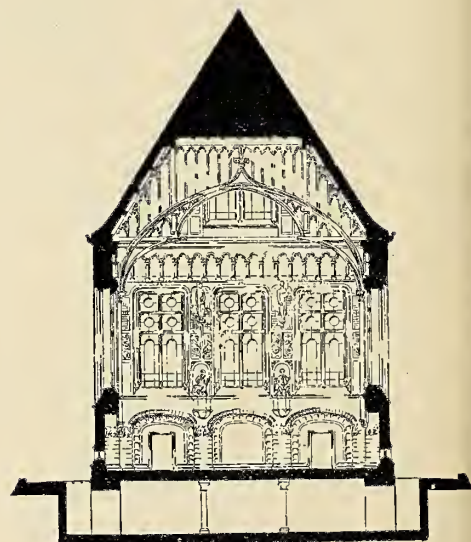
JAS. W. McLAUGHLIN, ("TIFFECANOE"). ARCHITECT.
CINCINNATI.



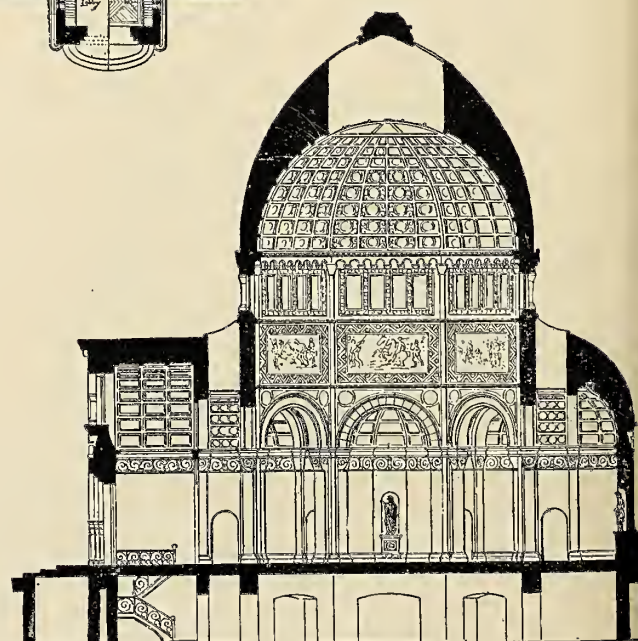
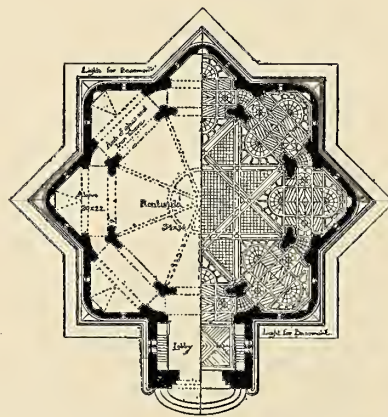
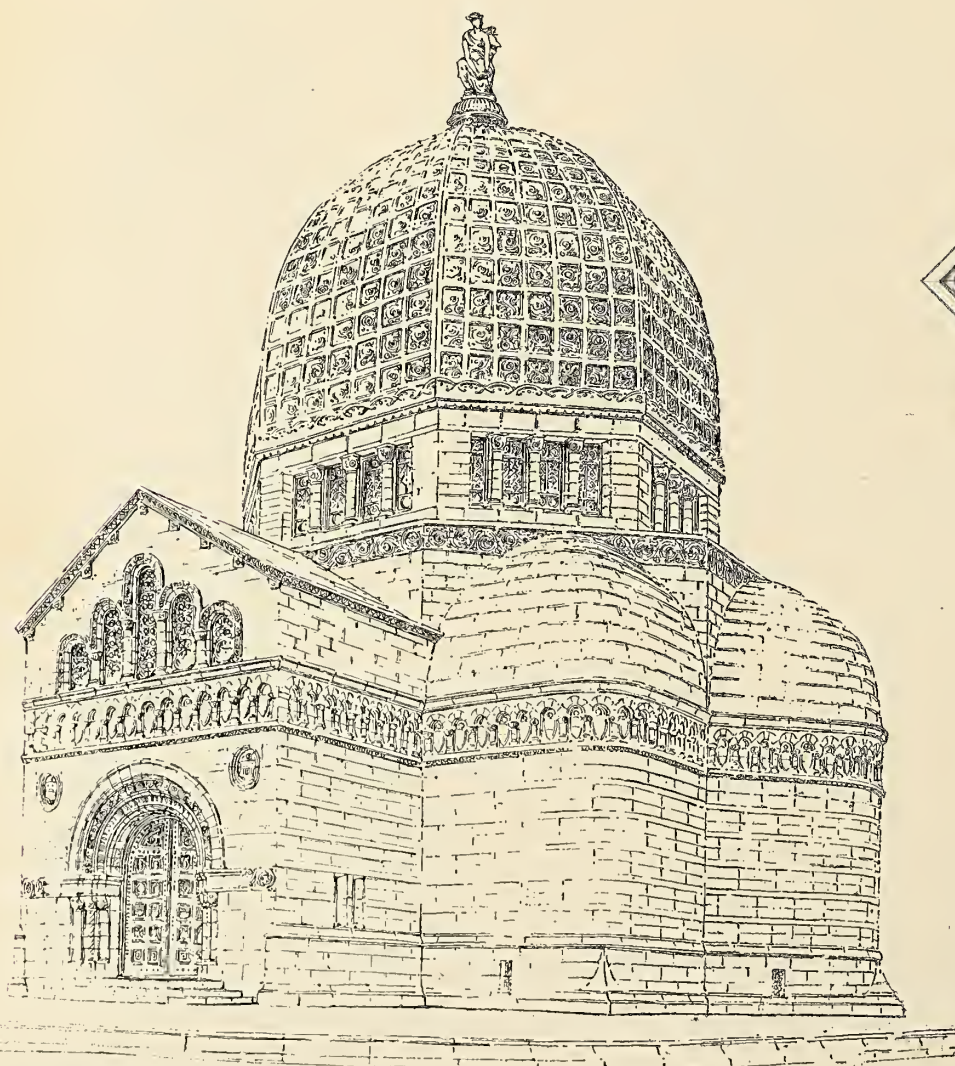
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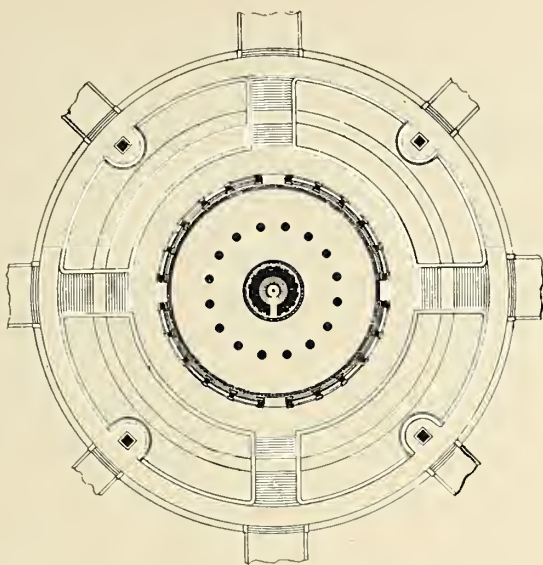
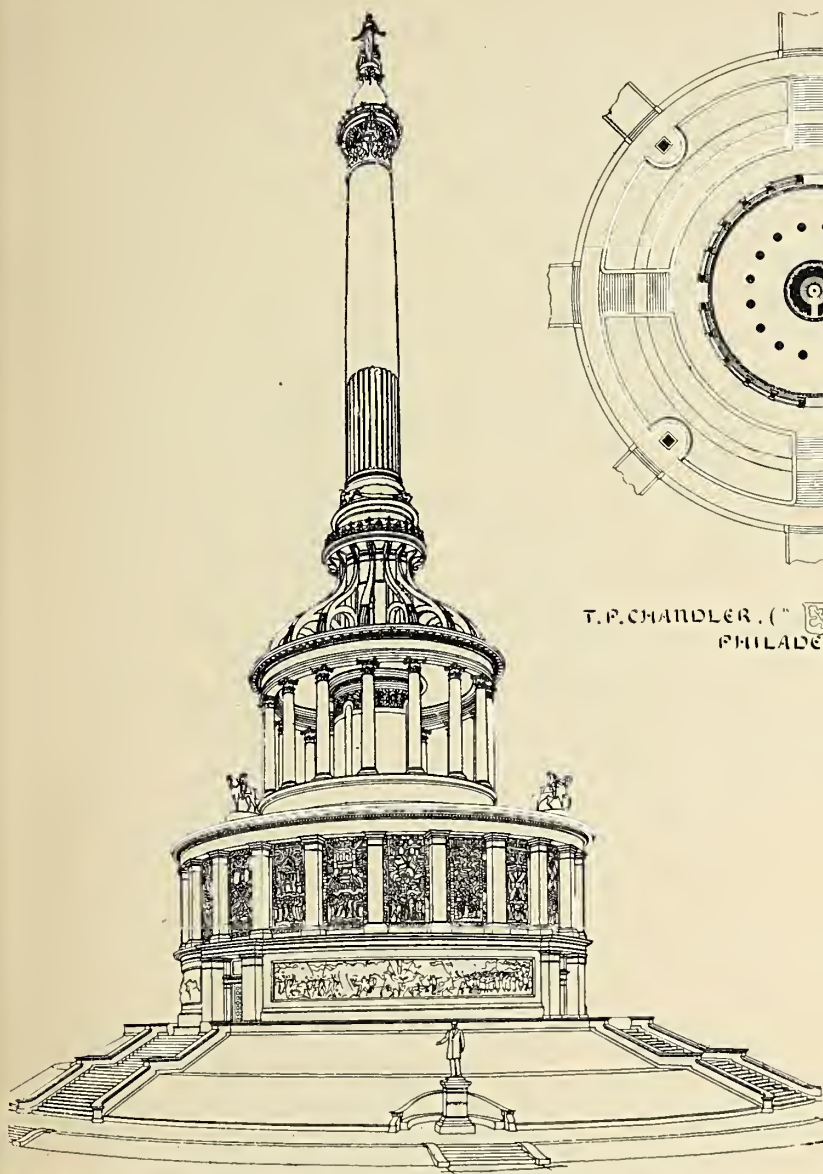


BURNHAM & ROOT, ("JACQUES CŒUR") ARCHITECTS, CHICAGO.

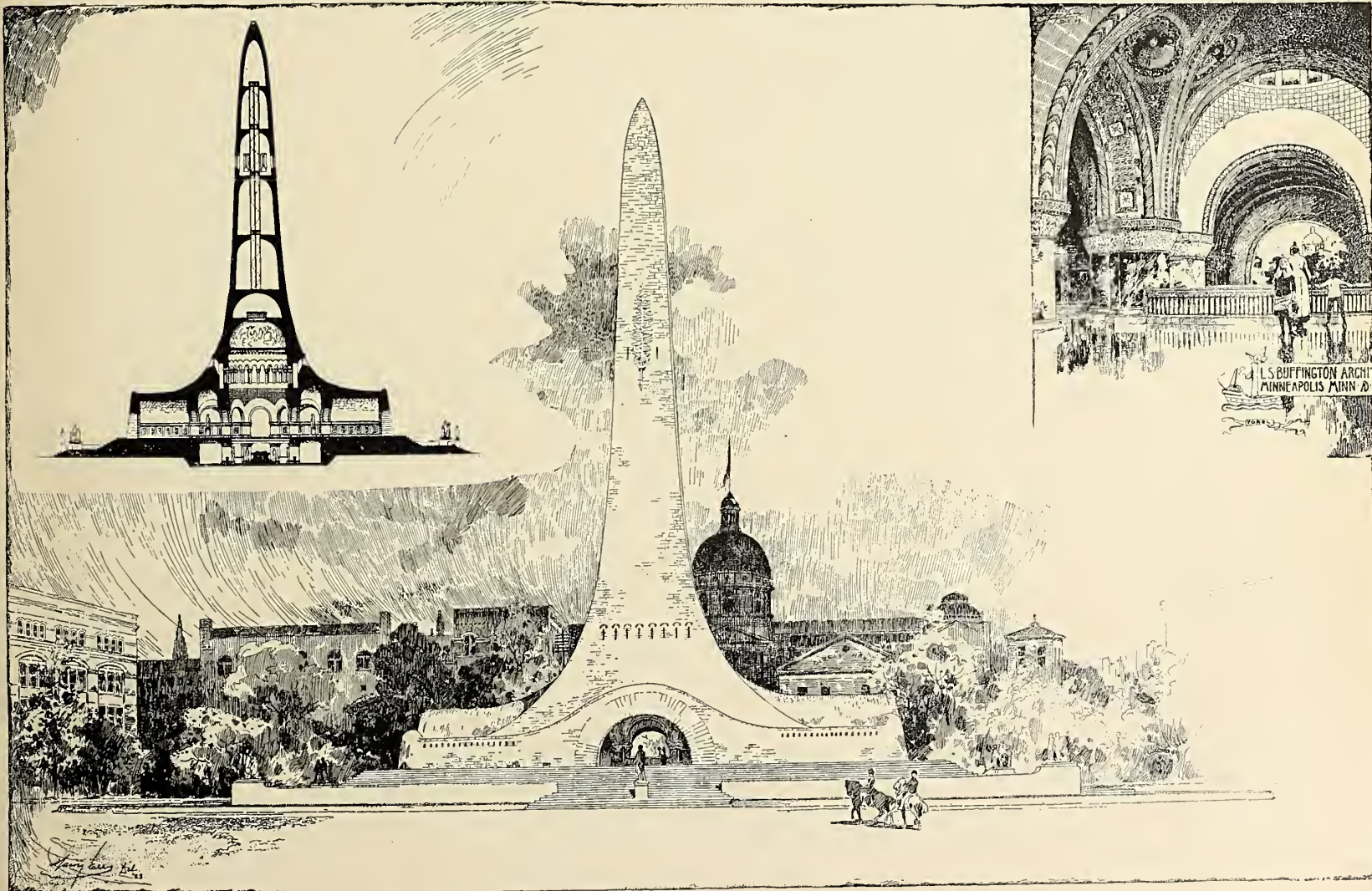
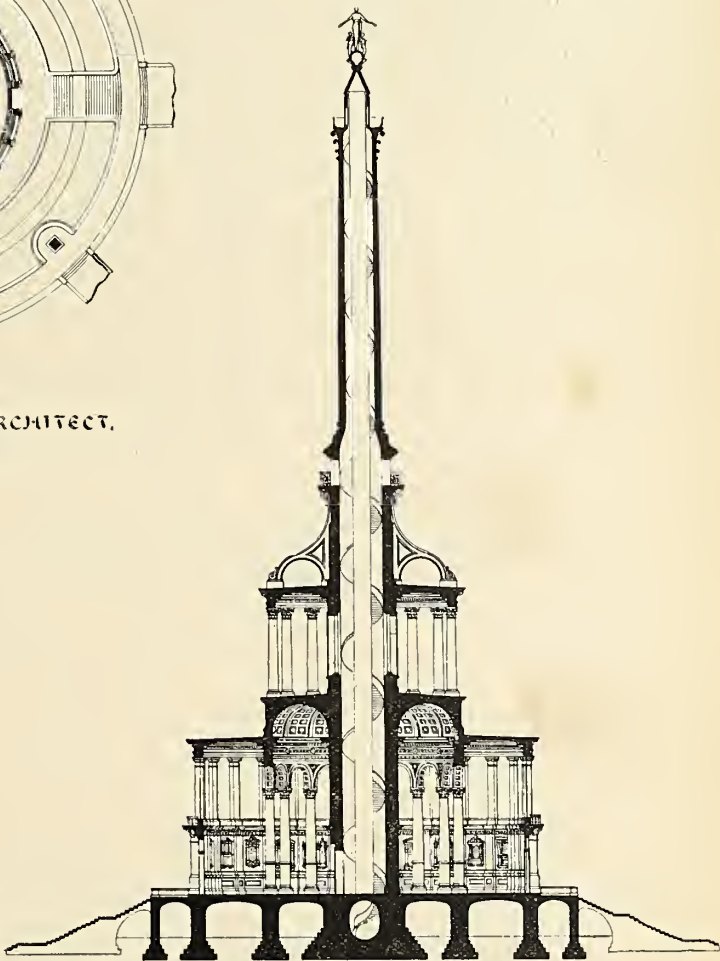


BURNHAM & ROOT ("SAN VITALE") ARCHITECTS, CHICAGO.

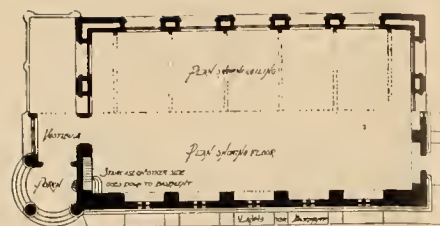




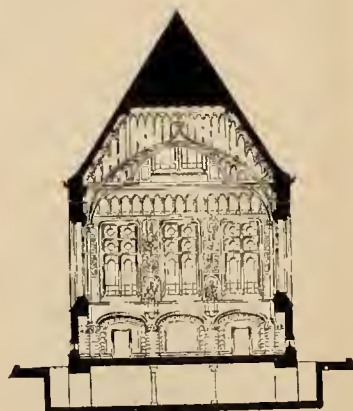
T. P. CHANDLER. (" ") ARCHITECT.
PHILADELPHIA.



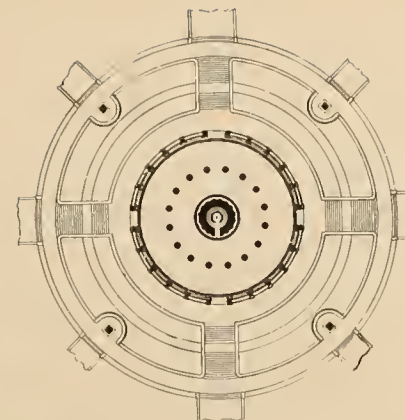
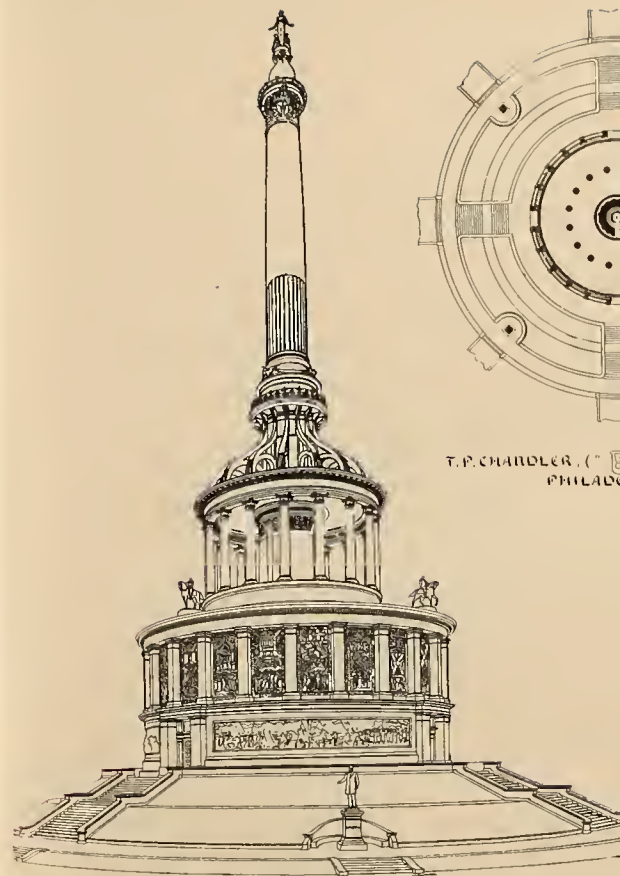
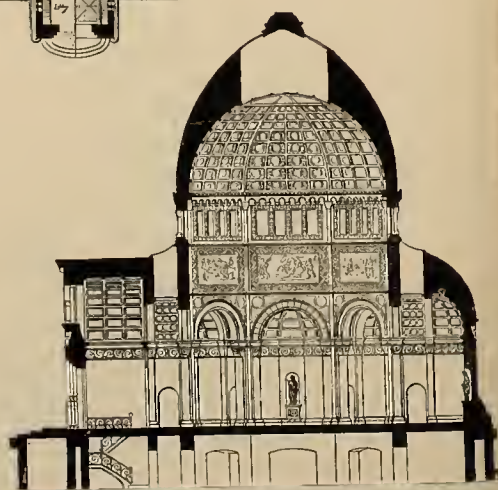
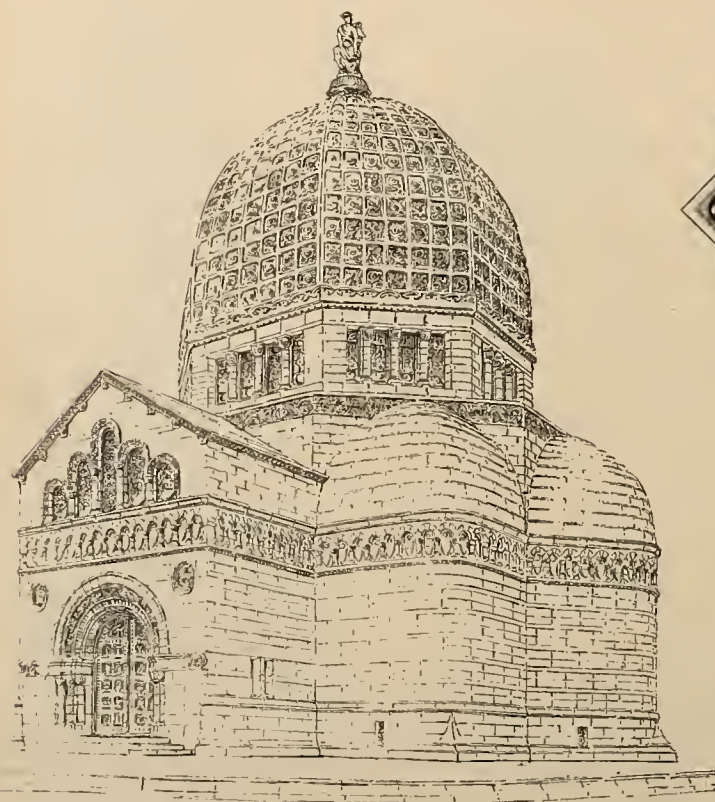
SOLDIERS' AND SAILORS' MONUMENT, INDIANAPOLIS.



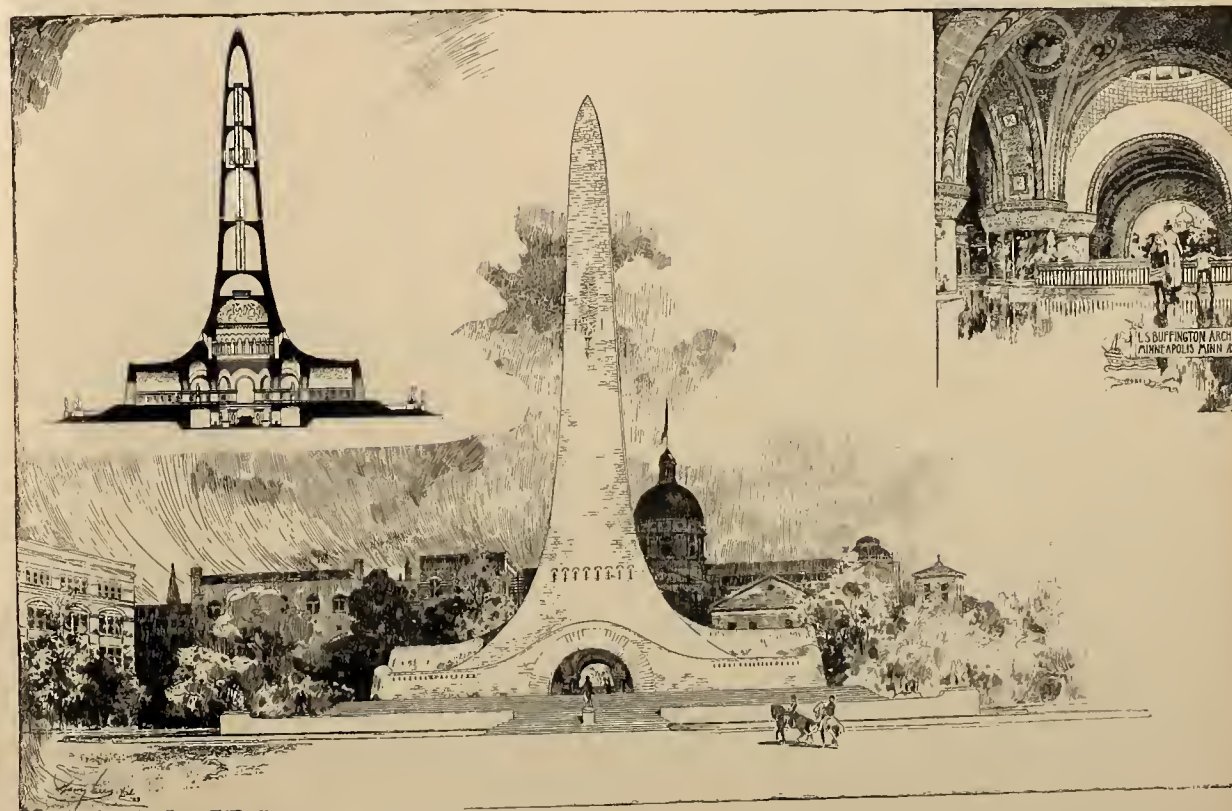
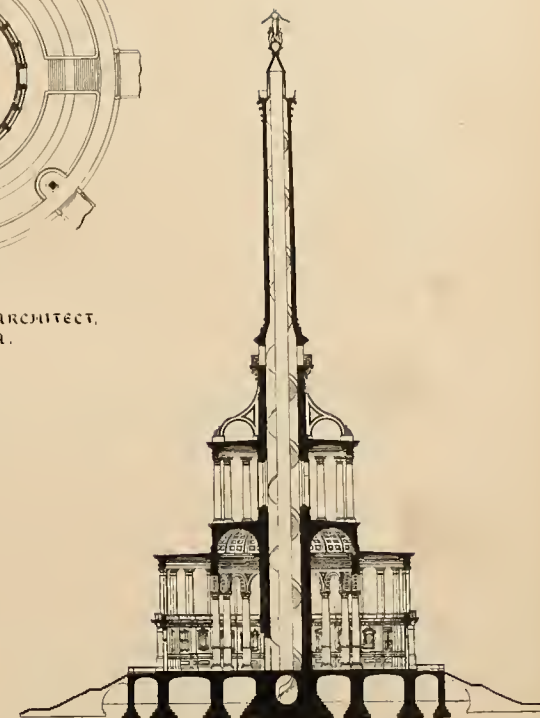
BURNHAM & ROOT, ("JACQUES CŒUR") ARCHITECTS, CHICAGO.



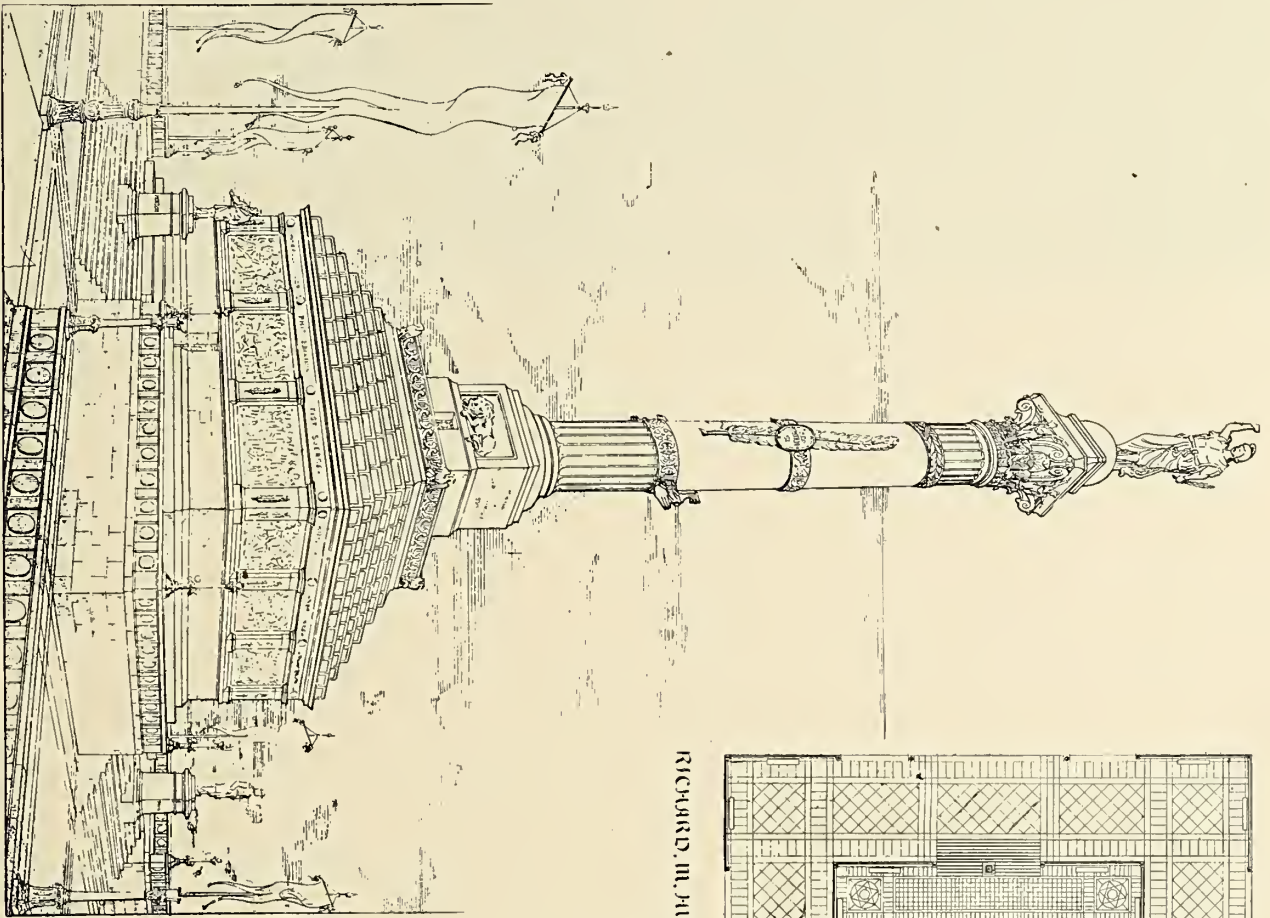
BURNHAM & ROOT ("SAN VITALE") ARCHITECTS, CHICAGO.



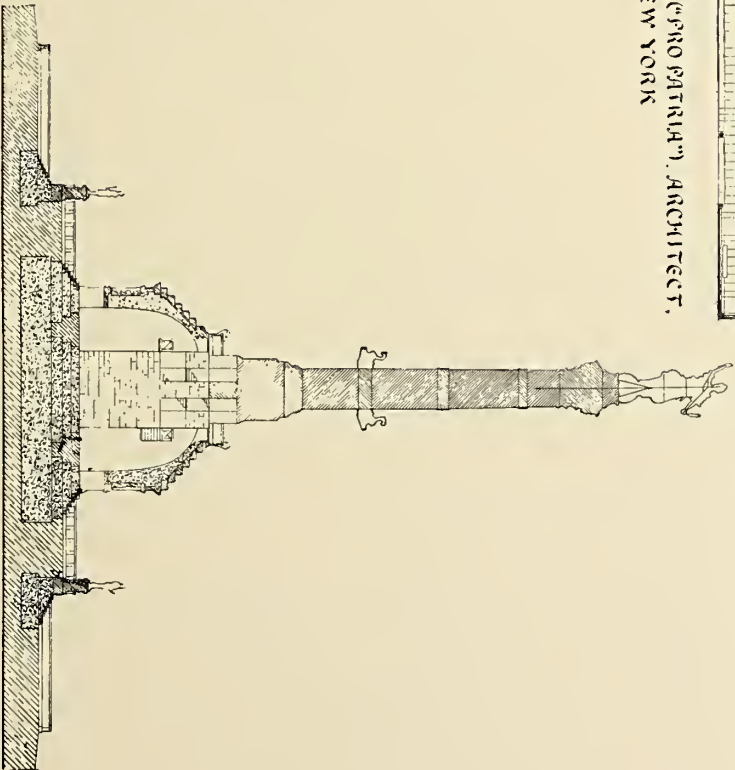
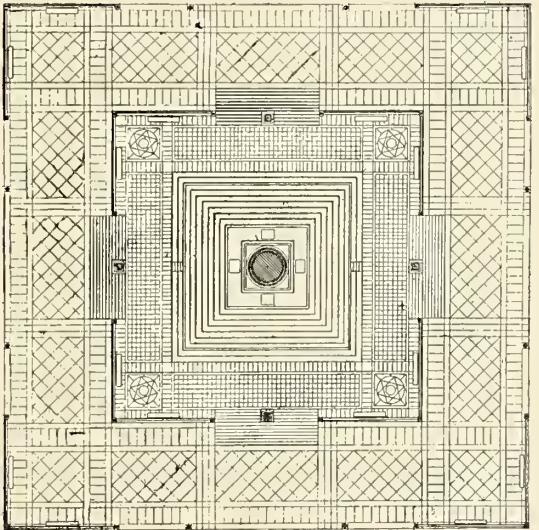
T. P. CHANDLER, ("") ARCHITECT, PHILADELPHIA.



J. S. BUFFINGTON ARCHITECT, INDIANAPOLIS, 1880.



RICHARD M. HUNT, ("PRO PATRIA"), ARCHITECT,
NEW YORK



COMPETITIVE DESIGN FOR INDIANA STATE SOLDIERS' AND SAILORS' MONUMENT, INDIANAPOLIS.



Entered at the Postoffice at Chicago as second-class matter.

A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRAVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. XI.—No. 5.

CHICAGO, APRIL, 1888.

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INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

THE Western Association of Architects' Committee on Code of Ethics, which will complete its work in August, will be glad to receive communications from any members of the profession interested in the matter. All communications should be addressed to the chairman of the committee, Architect Louis H. Sullivan, Borden block, Chicago.

JOHN MEIGGS EWEN, of the office of architects Burnham & Root, one of the best experts on iron and masonry construction in the country, some time ago commenced giving lectures upon construction to the draftsmen employed under him. Mr. Ewen, we are glad to announce, is now forming a general class, and invites any draftsman who wishes such a course of instruction to join. The course of instruction will commence about May 1, and we not only heartily recommend the draftsmen to take advantage of this opportunity, but are inclined to feel grateful to Mr. Ewen for presenting it to the draftsmen of Chicago.

THE change in the attitude of the carpenters, employers and journeymen, in Chicago, both toward each other and in regard to their individual action since last spring, is most striking. Last year at this time the journeymen were on strike, and the employers were struggling to maintain control of their own business. This year, the leaders of the unions, so powerful last year, declared a strike, and little notice was paid to it. The men are working steadily, and seem satisfied to do so. The employers, instead of holding their meetings to strengthen their position against strikers, are discussing the different national questions that affect their

interests as contractors and their employes as workmen. We do not pretend to say that this is a permanent change, and that it has been brought about altogether by the good sense that is found in the ranks of both the carpenter employers and the employes, but we certainly hope so. That a large factor in the change has been the determination by the contractors to have good men, pay good wages, and give permanent work, as far as possible, is certain; and if this policy, so well commenced, is kept up, it will be long before there is another general strike in the carpenter trade in Chicago.

Illinois State Association of Architects.

THE regular monthly meeting of the Illinois State Association of Architects was held Saturday, April 7, First Vice-President L. D. Cleveland in the chair.

The first order of business was the reading of the following paper on "Professional Ethics," by Normand S. Patton:

GENTLEMEN.—At the last convention of the Western Association of Architects the president devoted a large portion of his address to the question of professional ethics, and among his opening remarks said, "We are all in this union upon a level plane. The heads of some may tower above but the feet of none may stand below those of their brethren. Each man, therefore, recognizes the fact that, as far as can ever be possible, every advantage is conceded to his confrere that he asks for himself, and that in no act of his shall his brothers' rights be abridged by a hair's breadth."

I can find no better text than this as a basis for the remarks I wish to offer on this subject. If we recognize the fact that we all stand upon a level plane, then the main object of our architectural association becomes at once manifest, namely, to elevate the level of that plane. If some of our brethren are of greater stature than the others, yet is their altitude limited by the level on which they stand. A dwarf standing on a mountain summit breathes a purer air and enjoys a broader view of nature than a giant wading in a swamp at its base. The site of this great city was a swamp within the memory of living men, and we point with pride to the enterprise that has raised it to a healthful if not lofty level. Let us emulate this example and raise the standard of our profession until the title "Architect" shall be an honorable distinction.

This association recognized its proper functions early in its existence, and made an effort to call in the power of the state to assist in the elevation of the professional level. This level is fixed by the standard of the lowest in the profession, and the object was to get rid of those who are altogether unworthy. While waiting for the success of our move in this direction, would it not be well to help ourselves as far as we can, and then we may call in the assistance of the state to supplement our efforts.

I propose to limit my remarks to one particular point in which I believe the standard of professional practice can be elevated.

There is no subject that touches us more vitally than that of fees. We work for the good of our fellow-men, we work for reputation; but more than all, most of us work for a living, and it is generally conceded that our profession is poorly paid for the amount of responsibility laid upon it. The public appreciation of architects has undoubtedly increased of late years, but the demands upon us have increased in a like ratio.

In this matter of fees let us take a practical view of the matter, and not strive for the unattainable. There never has been, and never can be, any absolute illuistry. The young attorney does not get the large fees that fall to the lot of the few illustrious men in his profession. The young doctor is not consulted when an emperor is ill. The compensation that any professional man can get depends upon the esteem in which he can persuade the public to hold his services, and this is always held in check by the value which others in the profession set upon their services.

If one architect can persuade the public that he is more skillful than any of his competitors, then he can demand and secure some increased compensation; but this compensation can be high only relatively to that received by others. If the disparity is great, the client may take the cheaper, though possibly inferior, man.

I believe that the facts will bear out the statement that the charges of architects for similar services are more nearly uniform than those of the professions—law or medicine. We have a schedule of charges which the public interprets in its own interest as meaning the maximum, and as a matter of fact most architects are content to secure the standard rates and make no effort to get more. It becomes then a matter of vital importance to make these rates standard, not only theoretically but practically, and it is a serious detriment to the whole profession to have any considerable number of its members habitually do work for less than these recognized rates.

But in this matter we cannot act by compulsion. We must allow every competent architect to set his own value upon his own services, and we can not resort to any trades-union scheme of reducing all to one level of price.

One thing, however, we ought to do as far as the power of our association extends, viz.: see to it that every man with whom we enter into daily competition is an *architect* in the proper acceptance of that term. We hope some time to have the state protect the public and the profession from the practice of those who have no right to the title of architect, but meanwhile we can free our ranks of one class of disturbers of the peace.

If a man devotes himself as his regular business to the practice of architecture, having an office and depending upon the income derived from his practice for his support, we must, under the present order of things, allow him to set his own price upon his services, whether or not he belong to our association and whether or not his abilities be of the highest order. But it is quite a different matter with those who receive regular salaries from architects, presumably enough to support them, and then employ their spare time in preparing plans in competition with their own employers and the profession at large for any price they can secure. They pass themselves off as architects, and by offering their services for less than the actual cost of similar work to a regular practitioner, secure patronage and thus degrade the level of the profession. It does not break the force of this argument to say that some draftsmen are better qualified than many architects. The fact that a man is receiving a regular salary, and has no expenses except the stationery used, makes his fees for work done in extra time almost clear profit, and enables him to work for a price that no architect can meet who has office rent and salaries to pay.

Someone may answer that the cure for the competition of draftsmen is very simple: discharge any man who does such work; and certainly it would be a strange condition of affairs for an employer to allow his employes to compete with him, even if their work were done outside of office hours, and yet there are architects who do this very thing and allow their draftsmen to practice on their own account, even taking time during office hours and receiving their clients in the office. It is to be presumed that the draftsmen are only permitted to help themselves to small jobs that are not worth while for the architects themselves to take. But there may be other architects who do not despise such work, and it is unjust to them to subject them to competition with another architect's draftsman. It is especially unfair to the younger architects whose reputation is not yet established, and who, having no grand buildings to point to, find it difficult to secure a proper price for their services. An architect who allows his draftsmen to compete with the younger members of the profession certainly is not living up to the last clause of our text, "that in no act of his shall his brothers' rights be abridged by a hair's breadth."

The injury does not stop with the younger man. In lowering the level of the profession it is a detriment to all.

In the address from which I have already quoted, the speaker said:

"In theory, a profession is in no one way more elevated above a trade than in the fact that among its members certain methods are eschewed which among tradesmen are legitimate."

It is needless to do more than remind you that no association of merchants or manufacturers would tolerate a practice such as the one under discussion. Upright dealing is the basis of all business agreements.

Manufacturers arrange for uniform price-lists and discounts on similar goods, and any member of an association who should be detected in secretly breaking an agreement to which he had openly consented would promptly be expelled. Let me suppose an instance and you shall judge whether the case is a parallel one.

I approach one of you on a subject that has been exciting some interest and say, "Let us sign an agreement to raise the price on residence work to seven per cent." You are somewhat reluctant to bind yourself absolutely to such a price, but finally decide that you will take your chances with a sufficient number of men in whom you have confidence. When the hands of my competitors are tied by this agreement I say to my draftsmen, I have bound myself to make no plans for dwellings for less than seven per cent, but when I find that parties will not pay that price I will give you the opportunity to get the work at any price you can secure.

I do not suppose that such a case has ever happened, but such a thing might have been done if a few more signatures had been appended to the agreement circulated last winter.

Gentlemen, is it honest to say to our fellows, "We never do work for less than five per cent," when secretly we allow our draftsmen to take work for less?

It is useless to say that we are not responsible for what our employes do at home. We are responsible if they interfere with our fellow-architects with our knowledge and consent. If there must be a competition in rates between architects let it be above board and honest, and let us condemn any man who pursues one policy in the front of his office and another in the back of it.

The paper was then discussed.

Mr. Patton: Mr. President, I would like in this connection to offer the following resolution. I do not care to have it adopted at this meeting, but would like to see it receive the indorsement of every member of this association:

Resolved, That it shall be considered unprofessional conduct for a member of this association to allow anyone in his employ to do work in his own name as an architect, and this shall be construed as meaning all architectural work done by employes, either during or outside of office hours, shall be done in the name of the firm, and the compensation for said work shall be paid to said architect or firm. If any member of this association shall violate the above resolution, it shall be considered sufficient cause for expulsion from the association. Any case accruing under this rule shall come before the Executive Committee, whose action shall be final, as provided for in cases of discipline.

The Chair: Gentlemen, would you like to have the resolution acted upon at this meeting? There is not a very large attendance today, and it might be well to defer it.

Mr. Clay: I think it would be better to take a little time to consider this resolution. It certainly meets my views, and I can endorse it; but I think before we adopt it, it should be brought to the attention of every member of the association, published in some conspicuous form, and in this way brought clearly to their attention.

Mr. Adler: I think it would be well to have it printed and sent to every member. I move as an amendment that the Executive Committee cause copies of the resolution to be sent to the individual members, with a notification of action to be taken at the next meeting upon it, if in their discretion they believe the publication in the professional journals be not a sufficient notice.

The amendment was accepted and carried.

Mr. Clay: Mr. President and gentlemen, before we adjourn, I think we have a little matter we ought to settle today. Mr. Baumann requested me to present, in his absence, the report of the committee of which he is chairman, that was appointed at the last meeting to prepare a suitable reply to the circular sent out by the Grant Monument Association of New York. I will read the letter as framed by the committee and passed upon by the Executive Committee:

Hon. Alonzo B. Cornell, Chairman of Grant Monument Committee, New York:

SIR,—The Illinois State Association of Architects respectfully begs leave to submit herewith their views as to the intended competition in respect to the proposed Grant monument. Your circular of January 6 has been before us, and although in some of its sentences it furnishes evidence that your committee have a desire to be fair, it nevertheless fails to present the matter in a form which is acceptable to the better class of architects, whom doubtless you wish to engage in the competition.

We have learned, through one of our members, that you have inquired of the secretary of the Soldiers' and Sailors' Monument Commission at Indianapolis as to the manner in which their late competitive scheme was conducted. Doubtless you have become possessed of every information on that subject, and we hope you will have decided upon such a re-issue of your circular as would be most likely to make the competition acceptable to the profession at large, even beyond the borders of our country.

The motives of this communication are ideal entirely in their character, the very intent and purpose of our association being advancement of our profession. We clearly foresee that, if the competition for a monument to the greatest hero of our nation, the one who served his country in the most memorable period of its history, can be such as will

be decided by worth and merit truly and only, the whole character of our profession will be correspondingly advanced. Allow us to hope that this, likewise, will be one of the inducements which shall lead, or has led, to a remodeled "Address to Artists, Architects and Sculptors."

In conclusion, we beg to submit a printed "code" by which some private competitions (Cincinnati and Kansas City Exchanges, and others) were governed, leaving to your own judgment such changes and amendments as your special case may demand.

Respectfully submitted,

ILLINOIS STATE ASSOCIATION OF ARCHITECTS,

CHICAGO, April 7, 1888.

R. C. BERLIN, Secretary.

Mr. Adler: I second the motion, but would like to see inserted "together with the competition code of the Western Association of Architects."

The suggested amendment was accepted, and the motion as amended was unanimously adopted.

On motion, the meeting adjourned.

Mr. Patton's resolution will be the order of business at the next regular meeting, May 5.

Association Notes.

CHICAGO CARPENTERS' AND BUILDERS' ASSOCIATION.

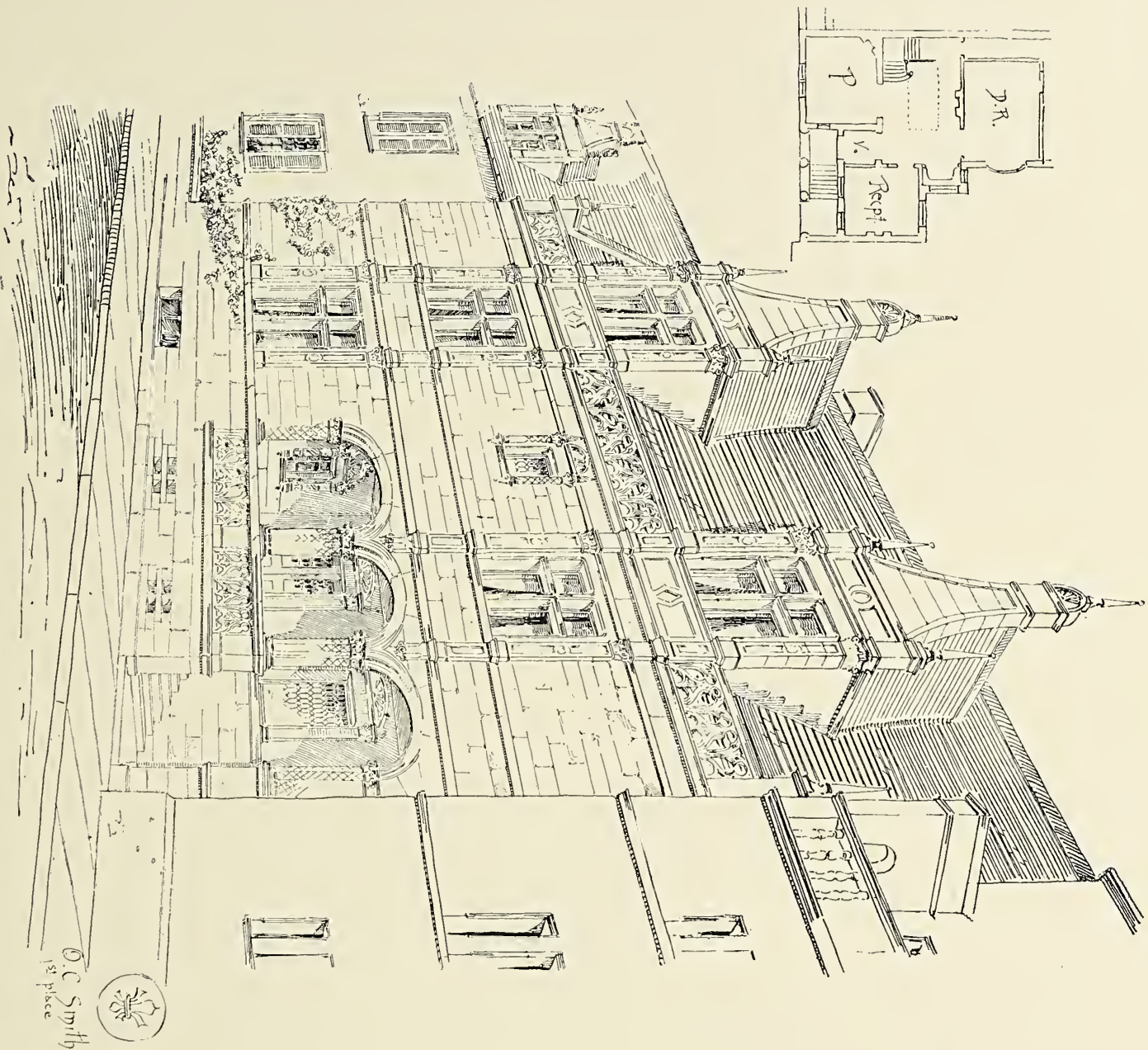
The association held its regular meeting April 12, President Hearson in the chair. The principal business transacted was the discussion of the future work of the association. It was decided that some practical subject should be discussed at each meeting, and on motion of Mr. Tregay, a committee was appointed to make a selection for the next meeting. The committee appointed by the chair is Messrs. Tregay, Goldie and Campbell. On motion, the president and secretary were added to the committee.

The committee decided upon a subject before adjournment, and announced the report of the committee of the National Association of Builders on "Estimates," and also that upon "Apprenticeship," the subjects for discussion at the next meeting. The association meetings will probably be largely attended and prove profitable to the members.

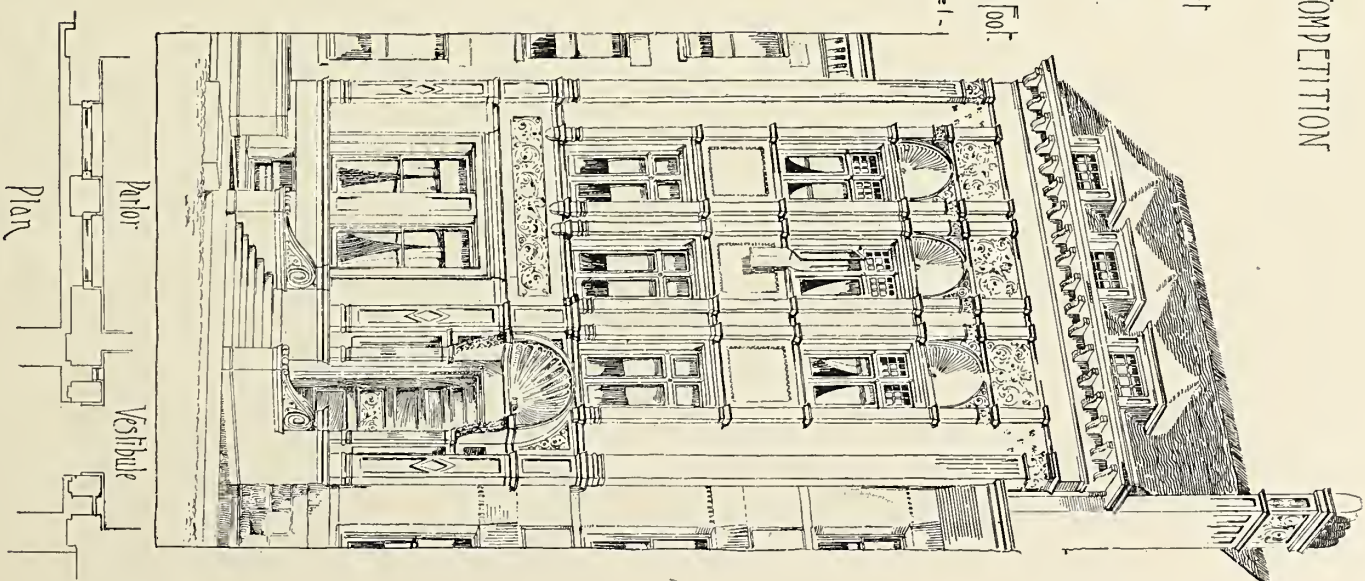
EDINBURGH ARCHITECTURAL ASSOCIATION.

The usual fortnightly meeting of the association was held March 10, the president, Mr. Hippolyte J. Blanc, in the chair. The president at the outset of the proceedings made suitable reference to the late Mr. T. Stuart Burnett, A. R. S. A., and to Mr. C. Leadbetter, architect, both of whom were members of the association. W. P. Buchan, of Glasgow, read a paper on "The Prevention of Down Draft in the Ventilation of Churches, Schools and other Buildings, with a new Formula for Calculating the sizes of Outlet Pipes and Wind-acting Exhaust Ventilators." Among the various causes of draft Mr. Buchan referred to the temporary one of the occupying of churches and other buildings immediately after they were finished and before the plaster on the walls and roof was dry. This caused currents of cold and moisture-laden air to be set up, to the discomfort of the sitters. The air of the interior, coming in contact with large single-glazed windows, was often another cause of drafts being complained of. Down drafts through fine-looking pretended ventilation openings in the ceiling, but which were only mere holes in the roof with no pipes or means for proper ventilation. Fitting up wind-acting exhaust ventilators, and often in not very good situations, without any provision to prevent down draft, on the supposition that they really were as entirely free from down draft, as they were often puffed up to be, quite oblivious of the fact that the wind as a motive power is very inconstant, and that changes in the condition of the atmosphere are many and various. As a cure for the evils here alluded to, Mr. Buchan advocated the use of his self-acting anti-down draft and inspection valve boxes—a specimen of which he showed—which, in addition to preventing down draft, enabled the action of the ventilating apparatus to be easily seen. Another cause of disagreeable draft was the improper way in which fresh air direct from the outside was often admitted as, e. g., too near the ceiling, and at the tops of windows, and in such a way as to be deflected down on the sitters or occupants. Mr. Buchan thereafter explained the basis of his new calculating formula for ventilation. At the close a hearty vote of thanks was accorded to the lecturer.

The third excursion of this association for the session took place recently, under the leadership of Mr. David MacGibbon, architect. The first place visited was Monkton House, near Millerhill, an old Scottish mansion said to have been a favorite residence of General Monk. Although the main building has been a good deal modernized, it still retains several of its original features, particularly in the courtyard, where some interesting and rather unusual examples of mullioned dormer windows are still preserved. After passing a vote of thanks to Sir John D. Hope and Mr. Wm. Gibson, the proprietor and tenant respectively, who were present, the party proceeded to Woolmet House—a large mansion erected in 1686. It is an admirable and little altered specimen of the larger houses of the period when the old Scottish plans were being abandoned and modern plans adopted. The ground floor contains apartments instead of the vaulted cellars which formerly occupied that position. But the principal rooms are still on the first floor. A wide square staircase gives access to the first and second floors. The dormer windows have been originally of quaint design, but are now somewhat spoiled by an addition to the height of the walls made in the last century. They contain the monogram "W. B." for W. Biggar, and the arms of that family are carved near the doorway. An open courtyard in front, with a great entrance gate or archway, added dignity to the structure, and the whole was surrounded with a moat. The next place visited was Woolmet Church, thrown open by the kindness of Sir John Don Wauchope, Bart. This building was rebuilt a good many years ago by the late proprietor of Edmonstone as the burial place of his family. It represents the old parish church of Woolmet, which belonged to the Abbey of Dunfermline and was served by a vicar. In 1614 the laird of Edmonstone obtained the permission of the presbytery to have prayers read in it morning and evening, but in process of time this practice was disused, and the church was converted into the Edmonstone burying place. The excursionists were then kindly permitted to walk through the Edmonstone House policies.



CHICAGO ARCHITECTURAL CLUB COMPETITION
A City Front
in
Renaissance
Drawn by
May foot - Show foot.
T.O. Fraenkel -
2nd place -



CHICAGO ARCHITECTURAL CLUB COMPETITION, A CITY FRONT IN RENAISSANCE.

OLIVER C. SMITH, FIRST PLACE; T. O. FRAENKEL, SECOND PLACE.

Salt Water for Cement Mortar in Winter.

THE following German experiments designed to ascertain the effect of frost upon hydraulic mortars and cements gauged with and without the addition of salt to the water have been quoted in the *Revue Industrielle*. Cubes of stones 6 c. c. in area were used in these experiments, and were joined together with cement mixed with water, ranging from pure rain water to water containing from 2 to 8 per cent of salt. While the cement was yet fresh, the blocks were exposed in air at a temperature of 20 degrees to 32 degrees Fahr., after which they were kept for seven days in a warm room. At the end of this time the specimens were examined. The cement made with pure water was quite crumbled, and had lost all its tenacity. The cement mixed with water containing 2 per cent of salt was in better condition, but could not be described as good; while that containing 8 per cent of salt had not suffered from its exposure to the lowest temperature available for the purposes of experiment. It is possible that the salt merely had the effect of preventing the water in which it was dissolved from freezing at the temperature named, and so permitted the cement to set in the ordinary way. These results may, however, be usefully cited at this particular season, when outdoor building operations are liable to be suspended on account of frost, and the stability of green work is threatened by the same influence.

Correspondence.

Editors Inland Architect: LOUISVILLE, Ky., April 18, 1888.

I have received the April number of THE INLAND ARCHITECT, and wish to express my disapproval of the resolution offered at the last meeting of the Illinois State Association of Architects, published on editorial page.

I cannot see how anyone but a crank could offer such a resolution, and do not believe any architect did.

Of course there is a class of petty, picayunish architects whose whole reputation depends on their draftsmen, consequently it would be for their benefit to have such a resolution passed.

When a draftsman engages to work for an architect eight hours or nine hours, what right has the architect to say what he shall do outside of those hours?

Supposing a draftsman does do work outside of working hours, is not his employer benefited by the knowledge he gains by so doing? And it seems to me that any sensible architect would encourage rather than discourage such an ambition.

Yours respectfully, FRANK M. SNYDER.

Mosaics.

ARCHITECTS BURNHAM & ROOT have removed to the Rookery building. ARCHITECTS BEMAN & PAMENTIER have removed to the Cisco building. ARCHITECTS COBB & FROST are now occupying offices in the Pullman building.

MR. GEORGE KENNAN will tell in the May *Century* how he came to go to Siberia on the *Century* expedition.

THE Winslow Brothers Co., of Chicago, the architectural iron firm, have removed to 378-396 Carroll avenue.

GEORGE S. MORRISON, C. E., of Chicago, has just completed a handsome residence from his own design and plans. It is built of brown obsidian brick, and is thoroughly fireproof. All floor-beams are of iron, the stairways are iron and marble. The fireproofing was done by the Illinois Terra-Cotta Lumber Company. Joseph Downey was the mason contractor.

A NOTEWORTHY novelty, now being introduced among architects and builders, is the Corey sash pulley. It is claimed that this pulley is absolutely noiseless, that it can be more quickly and easily applied than the ordinary pulley, and that when in, it remains permanently and effectually in place, and admits of no drawing of screws. It is also designed to abolish all necessity for check-weights, and make it impossible for the sash cord to jump the pulley. It is worthy of the examination of architects.

THE Lincoln history in the *Century* has run through six numbers. The November installment treated of "The Constitutional Amendment" and "The President-Elect." December, describes Lincoln's journey to Washington; January, the various steps taken in the formation of his cabinet; February continues the same subject, with much secret history incident thereto; March describes "The Fall of Sumter and Lincoln's Call to Arms," and April "The National Uprising." The next volume of the *Century*, beginning with May, will give a series of chapters of great interest. The subject of "The Border States" will be dealt with in the May number.

THERE has been patented at Rochester a new hot water heater, called the Clagne Hot Water and Warm Air Fireplace Heater, which combines the hot water and warm air system of heating with the pleasant and cheerful open fire. It consists in a fireplace having a depressed fire pot and grate, a fuel-feeding apparatus, and ash pit extending below the floor of the room, with special connections, by which fresh air is tempered by hot water. It is certainly a unique arrangement, and there seems to be no reason why it should not be a successful addition to house warming appliances. The model is on exhibition at office of Albert Will, 28 Exchange street, Rochester, N. Y.

THE United States Encaustic Tile Company of Indianapolis, the largest tile works in the West, has introduced the use of natural gas in all departments, and the result is a more uniform tile, better in color and finish, than ever produced in their works before with coal. Their plant is running at its full capacity, and is sufficiently large to handle promptly any contract they may be favored with. An inspection of these works, which contain seven large kilns, show how large a saving in labor is made

by the use of gas, as well as the advantage of thorough cleanliness where before all was coal dust and cinders. It certainly seems probable that Indianapolis will become noted for its encaustic tile industry.

Railroad Notes.

THE Michigan Central Railway Company has just issued a calendar with a beautifully executed colored lithographic view of Niagara Falls.

THE Chicago, Rock Island & Pacific Railway announce the sale of round-trip tickets at greatly reduced rates to points in Colorado, Utah, Idaho, Montana and Wyoming. These sales will continue daily during the spring and summer of 1888. Round-trip tickets will also be sold to popular resorts nearer home, such as Colfax Springs, Spirit Lake, Lake Minnetonka, and hundreds of other localities of interest to artist, tourist, sportsman and invalid. The great Rock Island assures to all purchasing these round-trip tourist tickets a choice of routes and the safest, speediest and pleasantest journey that fast through trains, composed of the finest cars that run on wheels, can afford. For further information, address E. A. Holbrook, General Ticket and Passenger Agent, at Chicago.

Synopsis of Building News.

Ashland, Wis.—Architects Conover & Porter. For Board of Education, two-story brick school house; cost \$12,000; under way.

In the residence portions new buildings are noticeable on every street, and work on them is progressing steadily. During the month ending today 104 buildings were begun, nearly all residences. A larger number will be built within the next month. Several fine dwellings will be erected—one to cost \$30,000, one \$25,000, one \$10,000 and seven \$3,500 up to \$6,000. Of public buildings the school board will erect four, two in the fifth ward, one in the second and one in the third, their cost aggregating \$25,000. The new jail building is nearing completion, and work on the new Congregational church will be commenced soon. Improvements on Second street, which is now the main business street of the city, are placed at from \$150,000 to \$225,000.

Bay City, Mich.—Architects P. C. Floeter & Co., of Bay City. For the M. E. Society, church edifice, 88 by 128 feet; cost \$15,000.

Carleton Place, Ont.—Architect S. R. Badgley, of Cleveland, Ohio, has prepared plans for a Methodist church building; seating capacity, 500; cost \$12,000.

Chicago, Ill.—Architect Frank L. Lively. For T. J. Shay, two-story double flat building, 24 by 62 feet. Dunreith redstone; cost \$6,000. Also same for Mr. Mooney. For J. T. Donegan, two-story double flat building, 24 by 62 feet. Pressed brick and brownstone; cost \$6,000.

Architect William Thomas. For F. J. Wilson, two two-story flats, brownstone and pressed brick; cost \$18,000.

Architects Burnham & Root. For National Woman's Christian Temperance Union, twelve-story hall and office building, 166 by 100 feet. First and second stories to be built of stone. Above that brick and terra-cotta; cost \$800,000.

Architects Wilson, Marble & Lamson have plans for an apartment building 58 by 170 feet; cost \$125,000. For W. H. Thomas, an apartment building 150 by 145 feet; cost \$100,000. For J. S. Schuesing, two-story basement and attic flat building, 25 by 62 feet; cost \$12,000. For M. Hiwell, two-story and basement residence, 20 by 70 feet; cost \$6,000. For Mrs. M. Griffin, three-story and basement flats, 27 by 40 feet; cost \$6,000. Eleven three-story and basement stores and flats, 220 by 80 feet, on West Twenty-second street; cost \$30,000. For Geo. W. Park, two three-story and basement residences; cost \$18,000. For M. F. Abbey, three-story and basement flat building, 24 by 66 feet; cost \$8,000. For Wm. Clancey, three-story residence; cost \$10,000. For John F. Finerty and E. Mendel, two three-story residences; cost \$20,000. For H. R. Wilson, six stone front residences; cost \$54,000.

Architect R. Rae, Jr. For J. S. Ranney, sixteen two-story brick dwellings in Englewood; cost \$64,000; also eight three-story brick stores and flats; cost about \$40,000. For C. S. Cleaver, two two-story stores and flats; cost \$10,000.

Architects Treat & Foltz. For E. J. Lehmann, three-story flats, 44 by 70 feet; cost \$13,000.

Architect M. E. Bell. For The Temperance League, eight-story fireproof building; cost \$200,000.

Columbus, Ga.—Architect F. J. Dudley reports: For Thomas Gilbert, three-story brick printing house, A. R. Callahan, ———. For Sternberg & Laurenherz, three-story brick store building, 46 by 135 feet, iron, stone and plate glass front; tile floor on first story; heated with steam; cost \$15,000; T. L. Genzard, contractor. For City Land Company, sixteen frame tenement houses, four to seven rooms each. For M. M. Hirsch, eight-room frame dwelling; cost \$3,600; T. L. Genzard, contractor. For St. Luke's parsonage, two-story eleven-room frame dwelling; modern improvements; finished in native woods, stained glass windows, etc. Three two-story frame cottages, to cost \$2,000 to \$3,000 each, for J. N. Emberg. For Dr. N. P. Banks, two two-story frame cottages. For Hon. H. R. Gotchins, two two-story frame cottages; cost \$2,000 to \$3,000 each.

Architects Smith & Co.: For School Board, two-story brick school building, stone and terra-cotta trimmings, Ruttan system heating and ventilating; cost \$21,600; to be completed by October 1; Smith & Co., contractors.

Architect H. Wolters. For Chancellor & Pearce, three-story brick store building.

Cornwall, Ont.—Architect S. R. Badgley, of Cleveland, Ohio: For St. Johns Presbyterian Society, church building, to be built of native limestone; Norman style adapted to the present period; seating capacity 800; finished in native woods; cost \$20,000.

Denver, Col.—Architects Balcomb & Rice: For W. E. Brines, two-story brick residence; cost \$3,000. For M. Boyle, one-and-one-half-story brick dwelling. For C. D. Gurley, residence; cost \$6,000.

Architect John J. Huddart: For W. J. Price, two two-story brick and stone residences. For Joseph Collier, two-story brick residence. For J. H. De Sollar, remodeling residence; also, has plans for residence to cost \$11,000; a barn to cost \$5,000, and a residence to cost \$6,000.

Architect O. Bullow: For W. H. Harvey, three two-story residences.

Architect A. M. Stuckert, for himself, two-story brick dwelling, 30 by 37 feet; cost \$4,300.

Detroit, Mich.—Present condition and outlook very good.

Architects Hess & Raseman. For August Schneider, two-story brick and stone store building, 25 by 90 feet; cost \$6,000. P. Dee, builder. For United Presbyterian Society, brick and stone church, 90 by 90 feet, slate roof; cost, \$30,000. M. Albrecht, mason; Clark, Vaiton & Co., carpenters.

Architect Joseph E. Mills. For S. M. Jackson, two-story frame dwelling, 34 by 45 feet; cost, \$4,000. For Ellen P. Redfield, two-story frame dwelling, 32 by 48 feet, slate roof; cost, \$3,500. Morris & Boden, builders.

Architect W. E. Brown. For Mrs. C. E. Barnard, three three-story brick and stone dwellings, 60 by 76 feet; cost \$13,000. A. F. Holmes, builder.

Architect Peter Dederichs, Jr. For Mrs. Schneider, three-story brick and stone store building, 30 by 36 feet; cost \$7,000. John Schraeger, builder.

Architect W. G. Malcomson. For John Shand, two-story frame dwelling, 29 by 51 feet; cost \$3,000. For Mrs. Halloran, two two-story frame dwellings, 25 by 42 and 35 by 45 feet; cost, \$4,400. For Geo. H. McAllister, two two-story brick and stone dwellings, 22 by 64 feet; cost \$7,500. F. Julian, builder.

Architect C. B. Cole. For Mr. Hasse, two-story brick and stone dwelling, 26 by 80 feet, slate roof; cost \$6,000. Dewey & Allen, builders.

Architect Geo. Scott. For Edward Flannigan, two-story double frame dwelling, 38 by 50 feet; cost \$3,400. Thos. Moore, builder.

Architects Rogers & McFarlane. For F. & R. C. Woodruff, block of seven two-story brick and stone stores, 138 by 60 feet; cost \$15,000. John Brennan & Co., builders.

H. W. Holcomb is building for himself a two-story brick and stone dwelling, 26 by 46 feet; cost \$4,500.

John R. Gentle is building for himself a four-story brick and stone flat building, 40 by 80 feet; cost \$18,000.

E. H. Durand is building for himself a two-story frame dwelling, 35 by 65 feet, slate roof; cost \$6,000.

Permits were issued during March for new buildings to cost \$293,175; alterations, etc., to cost \$6,815. Total, \$329,990.

Escanaba, Mich.—Architect Alf. C. Clas, of Milwaukee: For Frank Mead, frame dwelling; cost, \$6,500.

Hot Springs, Dak.—Architect Zach. Holmes: For Black Hills College, two-story and basement fireproof stone building, 74 by 54 feet; cost, \$15,000; to be commenced at once; Joseph Dennis, carpenter.

Lincoln, Neb.—Architect F. M. Ellis, of Omaha, was the successful competitor in the court house competition. The building is to be two-story and basement stone, brick and iron, 100 by 150 feet; fireproof.

Milwaukee, Wis.—Architect Alf. C. Clas: For Ignatius Friedmann, brick residence; cost, \$11,000. For Harry Gunther, brick store building; cost, \$13,000. For Paul Roe, brick store building; cost, \$7,000. For C. Scholtka, brick dwelling; cost, \$4,000. For A. C. Zimm, stone and brick dwelling; cost, \$14,000. For H. M. Benjamin, stone and brick residence; cost, \$18,000. For M. Adler, stone and brick residence; cost, \$13,000. For Ed. Burke, brick tenement; cost, \$10,000. Several cottages, aggregating \$10,000.

Minneapolis, Minn.—Architects Joralemon & Ferrin: For Frank Crowerr, five-story brown and red stone front business block, 44 by 82 feet; cost, \$33,000; contracts not let. For Chas. H. Gilman, three-story stone and shingle residence, 96 by 27 feet; cost, \$5,000; contracts not let.

Architect P. B. Hunt: For Capt. B. Hunt, four-story brick and brownstone business block, 130 by 55 feet; cost, not estimated; contracts not let; building to be commenced soon.

Architect W. Channing Whitney: For Gen. A. B. Nettleton, brick and brownstone residence; cost, \$12,000; contracts not let; to be commenced soon.

Architect H. W. Jones: For Dr. Hance, three-story stone residence, 60 by 100 feet; cost, \$25,000; contracts not let; to be built this spring.

Architects Geo. W. & F. D. Orff: For Geo. F. Thompson, two-story frame dwelling; cost, \$5,500; contract not let. For F. B. Mills, two-and-one-half-story dwelling; cost, \$6,500; to be commenced at once.

Architects D. W. Millard and C. E. Joy have prepared plans for the West St. Paul M. E. Society, for a pressed brick and brownstone church building; hardwood finish; slate roof; cost, \$30,000.

Architect C. C. Yost: For an eastern syndicate, amphitheater, garden houses, etc., 325 by 80 feet, at Lake Harriet; cost about \$50,000.

Among the permits recently issued are the following, that call for an expenditure of \$5,000 or more: F. Chamberlain, two-story frame dwelling; cost \$6,000. W. H. Eustis, repairs; cost \$10,000. H. E. Tucker, three frame dwellings; cost \$10,500; same, three-story residence; cost \$6,000. A. Bergman, two-story brick veneered dwelling; cost \$8,000. Anna G. Thomhill, two-story frame dwelling; cost \$5,000. J. A. Fagar, two two-story frame dwellings; cost \$18,000. M. P. Hawkins, two-story frame dwelling; cost \$6,500. J. H. Stewart, two-story frame dwelling; cost \$8,000. F. C. Penney, three-story brick and stone store and dwelling; cost \$35,000. National Bank of Commerce, seven-story brick and stone store and office building; cost \$175,000. James C. Plant, three-story brick and stone flat building; cost \$15,000. Bovey & De Laitre Lumber Company, brick and stone saw and planing mills; cost \$84,000. C. N. Brown, two-story frame dwelling; cost \$8,000. J. A. McClusky, four two-story frame dwellings;

cost \$10,000. J. H. Thompson, two-story brick veneered dwelling; cost \$10,000. N. W. Guaranty Loan Company, foundation; cost \$25,000. B. S. Buel, two-story stone and brick barn; cost \$5,000. Swedish Gospel Mission, brick veneered church; cost \$5,000. J. F. Crichtor, brick and stone tenement houses; cost \$10,000. R. R. O'Dell, two-story brick veneered dwelling; cost \$7,000.

Architect Charles S. Sedgwick has been engaged to design a building for the Young Men's Christian Association.

Prairie du Sac, Wis.—Architect Alf. C. Clas, of Milwaukee: For Wm. Conger, frame dwelling; cost \$3,000.

Stillwater, Minn.—Architect John H. Coxhead, of St. Paul: For the First Baptist Society, a fine church edifice to be constructed of pressed brick, trimmed with brownstone and polished columns, large parlors and robing rooms, social dining rooms and kitchen; also large Sunday School room to accommodate 300 scholars, Ruttan system of heating and ventilating; cost \$15,000.

Architect George Low: For Elliott House, three-story brick addition; for Mosier Bros., two-story brick store and office building; for R. C. Wright, cottage at White Bear Lake.

Isaac Staples contemplates the erection of a large hotel this season.

St. Paul, Minn.—Architects Gerlach & Haas: For the German Bauverein, three-story and basement brick and stone hall building; contracts not let; to be commenced soon.

Architect E. W. Ulrici: For Geo. Benz, brick, stone and terra-cotta residence; cost \$60,000; to be commenced soon.

Architect J. M. Doherty: For Judge Hale, six-story brick and stone business block, 138 by 90 feet; cost \$100,000; contracts not let; building to be commenced soon.

Architect John H. Coxhead: For C. L. Carmen, two-and-one-half-story frame double dwelling; cost \$10,000; to be commenced soon.

The depot and warehouse for the Joseph Schlitz Brewing Co., of Milwaukee, mentioned in our last issue, will be a six-story building, 104 by 78 feet; plain brick; fireproof; cost \$150,000; building will be commenced at once.

Among the permits recently issued are the following, which call for an expenditure of \$5,000 or more: For Dennis Ryan, repairs; cost \$12,000. Wm. Lettan, two-story brick dwelling; cost \$8,000. B. F. Wright, two-story frame dwelling; cost \$9,000. O. R. Cauley, two-story brick dwelling; cost \$9,000. Emil Munch, two-story frame dwelling; cost \$5,000. F. G. Laubin, two frame dwellings; cost \$6,000. Sons of Jacob, synagogue; cost \$18,000. Wm. Banholzer, two-story frame store; cost \$16,000. Joseph Dietrich, two-story brick dwelling; cost \$7,000. Jewett Norris, two-story brick dwelling; cost \$8,000. C. F. Rapp, three-story brick dwelling; cost \$18,000. Eugene Kelly, two-story frame dwelling; cost \$5,000. Michael Defiel, two-story brick store and dwelling; cost \$30,000. St. Agnes Church, two-story brick school building; cost \$13,000. Frank Choat, two-story frame dwelling; cost \$5,000. Thomas Wheeler, two-story frame dwelling; cost \$5,000. M. & J. Wicker, two-story frame dwelling; cost \$6,000. A. G. Wedge, two-story frame dwelling; cost \$6,000. Ignatius Will, two-story brick dwelling; cost \$10,000. J. W. Adams, two-story frame dwelling; cost \$5,000. Board of Education, three-story brick school building; cost \$63,000. John McClosky, two-story frame dwelling; cost \$5,000. S. King, two-story frame dwelling; cost \$5,000. W. P. Hilliard, two frame dwellings; cost \$7,000. P. J. Bague, two-story frame dwelling; cost \$5,000. A. H. Wilder three-story brick and stone store building; cost \$9,000. J. F. Milliam, frame dwelling; cost \$5,000. F. Radant, double frame dwelling; cost \$5,000. E. J. Kirkland, frame dwelling; cost \$5,000. O. Hanson, double frame dwelling; cost \$5,000. C. A. Moore, two-story brick veneered dwelling; cost \$9,000. G. Presley, two-story frame dwelling; cost \$5,000.

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PROPOSALS.

SEALED PROPOSALS FOR FURNISHING MATERIALS

AND FOR

THE CONSTRUCTION OF THE
COLORADO STATE CAPITOL BUILDING
AT DENVER, COLORADO.

Sealed proposals are invited by the Board of Capitol Managers until the first day of May, A. D. 1888, at twelve o'clock noon of said day, for furnishing materials and for the construction of the Colorado State Capitol Building, either for the entire work, or for portions thereof, according to the following classifications, to wit:

1. All stone and stone work required for a finished and complete job. Interior walls and piers commence at top of basement floor beams. Exterior walls commencing at grade line, and ready for first base course.

2. All brick and brick work required.

3. All plastering, plain and ornamental stucco work.

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MAY, 1888.

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IN deciding that the question of draftsmen working out of hours for others than their employers was not within the province of an architectural association to regulate, or at least should be left to the Committee on Professional Ethics of the Western Association, the Illinois State Association has done wisely. The discussion has brought this point of ethics before both architects and draftsmen, and all can be accomplished by private contract that the resolution was intended to cover.

ON another page will be found a report of the recent meeting at Washington of the joint committee of the Western Association and the American Institute upon the reorganization of the office of Supervising Architect, from the pen of Dankmar Adler, a member of that committee. It will serve to show how impossible it is for one supervising architect to creditably perform his duties, owing to the immense amount of labor devolving upon his office, and how necessary is the reform proposed by the architectural profession.

IN a letter received from James F. Gookins, secretary of the State Soldiers' and Sailors' Monument Commission of Indiana, which we publish in another column, our attention is called to a slight misstatement made in our account of the monument competition, recently closed. We find that the mistake came about, first, through our using the word "circular," when we meant "advertisement"; and, second, through a misapprehension in regard to the first advertisement issued by the commission. We remembered our conversation with Mr. Langsdale, chairman of the commission (see number for July, 1887), and, without investigating, was under the impression that the advertisement was written upon the same basis. We now find that it was not, but broadly outlined the course afterward so successfully pursued. The greatest praise is due to Mr. Langsdale as well as his co-laborers, and it is just that he and his commission should receive full credit for so earnestly and intelligently laboring for the best interests of his state, and in a direction that will have a strong influence upon like competitions in the future. We commend the letter of Mr. Gookins to the attention of architects, because of its bearing upon the present state and future conditions of public competitions in this country.

WE expect that the pulpit will continually remind us that living is something more than bread and butter getting and eating; and that the real becomes the more truly real by being indissolubly linked to the ideal. Therefore we are not surprised when Mr. Swing, in a recent sermon, speaks of the duty of making life beautiful, and tells us that truth plus poetry, is infinitely more telling in laying hold of men's hearts and stirring them to action, and that we should seek to see the poetry in life, and to express beauty in all our works of utility to the end that they may thereby be more effectually useful. In truth, so accustomed are we to hearing something akin to this from the pulpit that we are apt to overlook its importance, and to say that that sort of theory is very well for men who live in studies and read and make books, but that it is quite foreign to the business of erecting substantial warehouses, or selling potatoes, or running railroads, or performing any of the ordinary functions of modern industrial life. It is a pleasure, then, when a gentleman, who is at the head of a bank and president of the Chicago Board of Trade, and presumably driven by practical affairs, not only finds time and inclination to think about it, but even prepares an address, in which he sets forth the value of art in

modern life, and urges that all classes enter upon the study of art to the end that they may find in beauty a pleasure which successful business life cannot bring, and which shall serve as a permanent good when money and the like vanish. We are not sure that art, poetry, and love for beauty will do all for which Mr. Swing and Mr. Hutchinson hope. Mr. Matthew Arnold's unavailing prayer for peace may serve to indicate a one thing yet needful; but we are very sure that much can be done to make American cities and homes attractive, and American life less barren and hard, by such an art education as Mr. Hutchinson advocates. It can do what money and business success cannot do, and can be measurably independent of money; and the recognition of this fact from such a source may well be considered a sign of the times.

ON Sunday evening, April 8, at Chicago, occurred the first of a series of conferences between representative working men and prominent business men for the purpose of a friendly interchange of opinions, and of arriving, if possible, at a common understanding of conditions, needs and projected remedies that may aid in reaching an amicable solution of the problems that grow out of the relations between labor and capital. The general programme is to have at each meeting a talk or address on some subject of joint interest, followed by questions on the topic in hand, put by anyone in the audience and answered by the speaker; no random discussion being permitted. The first conference was held in a room accommodating about four hundred persons, and this being found inadequate, the subsequent meetings have been held in the Madison Street Theater, which has been filled to its utmost capacity. The audiences are composed of persons coming from all social classes, and following all manner of occupations. It is questionable what immediate result will be reached in the settlement of the questions at issue, or how largely either side will carry conviction into the minds of those already committed in another direction. But scarcely anything is of more importance at the present time than that there should be a mutual good feeling between employers and employes, a willingness to acknowledge that there are two sides to almost every specific question, a readiness to admit the honesty of the other side and to give all claims a respectful hearing. Whatever else may eventuate, it is hoped that these friendly talks may have the result of establishing mutual respect and good will from this informal personal contact.

THE first of the series of economic conferences was addressed by George Schilling, a cooper by occupation, on the subject of "The History, Past Achievements, and Present Plans of the Knights of Labor." Mr. Schilling is an individualist of the Herbert Spencer type, and carries the doctrine of *laissez faire* to the furthest extreme; finding the remedy for the present economic inequality in organizations of the laborers so strong that their just demands cannot be safely refused. The third meeting was addressed by Thomas Morgan, a blacksmith; subject, "The Remedies of the Socialist." Mr. Morgan presented facts and statistics to show the existence of extreme, unmerited poverty; he asserted that the competitive system had broken down, and cited the modern trust and pool in proof. The remedy is to be found in the gradual absorption by the state of all industrial and commercial functions that have fallen, or shall fall, into the hands of monopolies. These functions were thereafter to be performed by the state, through its civil servants, at cost of performance; and in due time the state would become a huge industrial co-partnership. Details were meager, and it was assumed that the civil service would be a business-like service. The second meeting was addressed by

Lyman J. Gage, president of the First National Bank; subject, "Banking and the Social System." Mr. Gage explained the operations of banks, what their economic functions are, and how they facilitate exchanges. He occupied a position midway between the extreme individualist and the extreme socialist, and maintained that the function of government was to regulate when necessary, but not to undertake the operation of industrial enterprise. At the fourth meeting Mr. Charles L. Hutchinson, president of the Board of Trade, explained the operations of the Board of Trade and its functions in furnishing the farmer a ready market, in checking illegitimate speculation, in disseminating information to producers and consumers, and in handling large quantities of product expeditiously and with advantage to both producer and consumer. He asserted that under the rules dealing was limited to something which either was actually in existence, or was actually to be in existence in due time, and that the rules of the board forbade gambling. Many of Mr. Hutchinson's hearers, ourselves among the number, were somewhat skeptical as to the rigid enforcement of this rule. Unquestionably, Mr. Hutchinson is correct in asserting that very few operators on the Board of Trade make more than a modest living.

ONE fact elicited by the economic conferences is the great divergence of opinion in the ranks of the Knights of Labor on the question of the functions of government in industrial society. In the organization are men of every conceivable shade of opinion on this point, from the extreme individualist with his "necessary evil" theory of governments, to the out and out communist with his all in all theory of the state. The majority of the Knights are socialists, and advocate a considerable extension of governmental activity in industrial and commercial enterprises. But the opposing factions are in perpetual ferment, and the interaction of the opposing opinions is certain to serve as a check upon extreme or revolutionary actions on the part of the organization. The least encouraging thing about the conferences is that the longest continued and most vociferous applause is awarded to those words of the speakers which least deserve any respect or consideration from intelligent hearers. A grossly extravagant statement, an assertion with hardly enough of truth to keep it afloat an instant, an utter misconception of the utility of or of the benefit conferred by a particular institution, a fling at the pulpit—this is the sort of thing that brings down the house, and causes the intelligent listener to give increased heed to Mr. Powderly's plea for education, mental and moral, as an indispensable prerequisite to a solution of the industrial or any other social problem. If these conferences shall in the least degree further this education, they will have served no small purpose.

THE *Vienna Building Trades Journal* has recently published two double page illustrations of American frame houses, mostly of the cheaper class, however, and adds some notes, from which we quote as follows:

With the exception, perhaps, of the English, no other people in the world understand so well how to find health and comfort in frame dwellings as the Americans. This is due in part to the Anglo-Saxon habit of separate living, one family to a house, and partly to the comparatively high average of prosperity among all classes of people. There every person who can afford it either owns his separate house or cottage, or rents one, and lives, if possible, in the suburbs, wholly removed from the scene of his daily toil, to and from which he journeys daily, often consuming an hour or more in the trip each way. It may safely be assumed that 95 per cent of the dwellings in the United States are detached.

Here follows a notice of the ready-made house manufacture in this country, as to which we cannot share the complacency of our foreign contemporaries' estimate, its effect being violently destructive both to art and originality. It is gratifying to find our German friends so appreciative of American achievements, and we are glad to note that the

illustrations on one of the double pages are fairly creditable specimens of the better class of American frame houses of five or six years ago. But most of the twenty-eight cuts on the other double page, which our generous neighbor devotes to us, are too strongly suggestive of the catalogue of the ready-made portable house manufacturing industry to receive our indorsement as illustrating anything above the very commonplace. In our monthly photogravure edition will be found a much better representation of the actual wood architecture of our day, as also of our more noteworthy brick and stone structures.

Photography in Architecture.

PART VII.—BY FRED D. FOSS.

THE developing qualities of a recently discovered chemical, known as hydrochinone, has lately been attracting the notice and experiments of numerous workers in the art. Their experiments have given such good results, and the developed negatives have shown such excellent color and printing qualities as to lead one to suppose that the acme of developing agents had been at last discovered. Hearing so many reports of the good qualities of hydrochinone lead the author to make a few experiments with this chemical, modifying and enlarging upon the formulas of those who had given their experiences and methods of compounding this developing agent through the various trade journals. After some trouble in finding the article (it can now be had at the stock house of Messrs. G. A. Douglass & Co., Nos. 185 and 187 Wabash avenue), I made up two solutions and went to work with a feeling that failure would result, but I must confess that surprise succeeded the anticipated failure. Hydrochinone is an article that seems to be little known at present, but the opinion among those who have used it is that when it has been tried by more of the professionals and amateurs it will be better understood and brought more prominently into use. The name hydrochinone is found spelled in several different ways, namely: hydrochinone, hydrokinon, hydrokinone and hydroquinone. As to which one is correct the reader is at liberty to say. It is spelled hydrochinone in this article, as that is the way it was found on the label of the bottle that came from Germany, and it makes little difference which way it is spelled so long as the article procured does the work. The first formula tried was that of a German chemist and photographer, Dr. Eder, and is as follows :

No. 1.		
Carbonate of soda	50 grains.	
Water	1 ounce.	
No. 2.		
Hydrochinone	12 grains.	
Sulphite of soda (crystals).....	60 "	
Water.....	1 ounce.	
DEVELOPER.		
No. 1.....	1 ounce.	
No. 2	1 "	
Water.....	1 "	

A plate was exposed upon a landscape in bright sunlight about two seconds, using the smallest stop in the lens—about the right time—and developed with the above quantity of mixed developer. No sign of an image made its appearance for five minutes, and several uncomplimentary thoughts regarding hydrochinone suggested themselves ; but at the end of seven minutes a faint sign of the sky was visible, and from this time forth the plate developed quite rapidly, not so rapidly, however, as it would have done had the pyro-soda been used, and at the end of fourteen minutes the development was stopped; the plate thoroughly washed, and placed in the fixing bath. The result was a very intense negative, but one full of detail and of a beautiful gray-black color. The next plate was exposed—upon the same subject with the same stop in the lens—seven seconds and developed with :

No. 1	6 drams.
No. 2	6 "
Water	2 ounces.

The result being a finely developed negative full of detail even in the darkest shadows, and of a color resembling an iron developed wet plate, and its printing qualities were excellent. Several other experiments were made, the results of which and the proportion of developer used will be given in the next article. In the last article the number of minims given in the fluid table should have read :

60 minims.....	1 fluid dram	60 minims.
8 drams.....	1 ounce.....	480 "
16 ounces.....	1 pint.....	7,680 "
8 pints	1 gallon	61,440 "

(To be continued.)

*Continued from Vol. XI, No. 4, page 43.

Style.*

BY LOUIS H. SULLIVAN, ARCHITECT.

IT would appear to be a law of artistic growth, that the mind, in its effort toward expression, concentrates first upon matters of technical detail, next upon certain abstractions or theories—for the greater part mechanical, and quite plausible as far as they go—and at last upon a gradual relinquishment of these, involving a slow and beautiful blending of all the faculties with the more subtle manifestations of emotion. In other words, such growth evidences at the beginning of its rythm the objective, and toward maturity, the subjective view.

This order of development, all things considered, is probably the one the most nearly consistent with the tendency of normal faculties. By normal faculties I mean those of average strength and keenness, free from any serious hereditary warp, or morbid bias, and subjected to the ordinary conditions of education.

I shall not in this connection directly consider the law of growth as manifested in the works of the few great masters, and which differs profoundly from the above; for their art in all its potentiality is born with them, and prophesies in earliest childhood the destiny of its great consummation.

But rather, I shall proceed from this basis: that the larger number of the art works of all ages are products of a cultivated mediocrity—mediocrity of the sort that therein technical dexterity aspires to compensate us in a measure for the absence of a motive impulse; cleverness and an oblique mentality usurp the place of an absent psychic life; wherein words are accepted in the stead of things, and things in the stead of meanings—in brief, that phase of culture which may be called the comedy of art.

To the master mind indeed, imbued with the elemental significance of nature's moods, humbled before the future and the past, keenly aware of the present, art and its outworkings are largely tragic.

Between these extremes there lies a quasi-transitional zone, wherein the concomitant elements that constitute the artistic nature are so varied in their relative energy and fruitfulness, wherein the growth of the faculties proceeds, not as a slow consistent and definite expansion of a pronounced individuality, but rather by a succession and gathering together of substititious amendments and accidentals, that, to the earnest student uncertain as yet of his status, and unwilling to make the larger sacrifices, there lies within this field the greatest harvest of attainment that can come to his hand.

And such considerations shape this fundamental difference between the great and the little master—that the latter acquires by means of painstaking and industrious re-hypothecation, while the former is driven on to his destination by forces superior to his yea or nay.

While it is true that the little master can never become the great one, yet is his domain large, and it includes all that ingenuity, talent, fine sensibilities and a considerable genius can accomplish.

To the domain of the little master let us therefore direct our attention. As to the great master, no hand may lighten his burden, no power shall make for him the crooked straight, and the rough places plane.

That which we call style, or rather, the word style itself, is as dubious in meaning as is any word in common use. The fact that a word is, and has been for generations, in common use, signifies that it has gathered to itself the multiple experiences of the race, and has become thereby thoroughly vitalized. Now note that the greater number of such experiences are largely independent of words, and the more subtle ones almost absolutely so, and this will suffice to indicate how true it is that one's capacity to interpret the meaning of a word, to perceive its obscure but real significance, is dependent upon the richness of his life experience within the domain of feeling that the word has come to symbolize.

If this is true of a word, how peculiarly true is it of a work of art. How much more essential is it, in turning from the word, style, to contemplate the thing, style, that our experiences be real, our judgment sober, our sympathy humane. And, most of all, how urgent is it, when we seek the meaning, style, in art, in nature, and in the soul, that every faculty be keyed to most delicate and exquisite tension, and our concentration be absolute as in a dream.

Style, in its essence, and amid all its spontaneous manifestations, is as unsearchable as is any other attribute of life. Analysis, however keen, can at best but discourse of its grosser material envelopings, or formulate abstractions concerning its rythms. Where reasoning fails, however, intuition goes blithely on, and finds the living quality in things common and near to the hand.

Have you thought much on common and simple things? Has it occurred to you how complex, how beautiful and mysterious they really are? Take, as an instance, a cow eating the grass of the field. Where other than in these natural doings may you behold perfectly spontaneous and unequivocal adjustment of means to end? At first glance how commonplace: to the thoughtful view how impressive and awakening an exemplar of unattainable style! Who shall portray that simple scene and infuse his work with the poetry the soul sweetly and perfectly attuned to nature's life perceives therein? Who shall apprehend the soul of the cow and of the grass, who shall, with naïve sincerity, express the explicit circumstance that the cow eats the grass?

We are prone to heed too little those things that are near us; we strain our eyes with looking afar off; we are meanwhile unaware that the grass, the rocks, the trees and running waters—that nature's palpitating self, indeed, is at our very feet. Through vanity of intellect we ignore that which is common; and by the same token we are lost to the sense that a poetic infinity resides in these, the commonest of things. No pathos can exceed their pathos, no inspiration can surpass their inspiration; there is not tenderness, not power, not alluring and impelling greatness which is not in them.

Therefore, I counsel you, if you would seek to acquire a style that shall be individual to you, banish from your thought the word style; note

* Paper read before the Chicago Architectural Sketch Club, April 9, 1888. Revised by the author for THE INLAND ARCHITECT.

closely and keenly the thing style, wherever found; and open your hearts to the essence style at all times and in all places. This is the germ.

The formative process is tedious and burdensome, clear and obscure, joyful and desponding, discouraging and bewildering to the last degree.

To be patient, observing, reflective, industrious and sincere; to possess that fortitude which constrains one to perseverance in spite of adversity, wounded pride, revulsion and disgust, and the secret consciousness that each successive endeavor is but a little less fatuous than its predecessor; to carefully train and nurture the eye, the ear, the hand, the heart, the soul; to work and watch and wait for a long time; these are part of the price which one must pay for a sound style, and the price mounts ever with the aspiration.

Thus do the faculties unfold with time, and the most precious one, that of self-criticism, comes in due season. Lastly comes the saddest of all—the power clearly to discern one's own limitations; for this inevitable warning surely indicates the end of growth, and fixes the permanent status.

The word soul is a symbol or arbitrary sign which stands for the inscrutable impelling force that determinates an organism and its life; it is that mysterious essence which we call our identity; it is that in us which is the most simple though seemingly the most complex; it is that which is born with us and which can undergo no fundamental change. Disregarding the perplexities and dogmas which, by natural inference, may be associated with this symbol, we must not fail or fear, in our search for an intimate understanding of the essence of style, to note that this elemental and abiding quality of identity or soul is inherent in all things whatsoever. Thus: we see the pine-tree—we notice its general shape, we examine its tapering trunk, its mode of branching, its hold upon the soil or the rocks, its branches, branchlets, bark, leaves, flowers, cones, seeds, inner bark, fiber of wood, sap; we reflect that these have all of them something quite in common, and this something impresses us as quality segregating this tree from other trees and other things. To communicate the sum and resultant of these impressions in speech we invent or make use of the word pine, which word expresses a tacit recognition of the peculiar nature or identity of this kind of tree, and, in a general way, as single words go, sums up its style. Pushing our investigation further, we discern that there are several kinds of pine-trees, each with a peculiar and well-defined nature; and it is this collateral definition which establishes for us a clearer perception of the identity of each. Ever unsatisfied, we become aware that one pine-tree is not precisely like another of the same kind; we conceive that it possesses a subtle and permanent charm of personality. Our sentiment is touched; we are drawing near to nature's heart. We love this tree. We watch by it through all its experiences. We are with it by night and by day. We see it respond to the warm caresses of the spring-time sun, and observe with a thrill how it sparkles and drips amid the glories of an April shower. It sways so gently in the passing breeze; it tosses and protests in the grasp of the furious storm. Among its brethren, in the summer forest, it stands so calm, so content; it freely gives its odor to the still air. Within the solitude of winter's sleep it also sleeps, and we too sleep its sleep in sympathy; erect and somber it stands, so motionless under its mantle of snow, so unspeakably calm, so content, so wild. Some day the storm snaps its life. The end is come. Slowly and surely time works decay, and that which was a pine-tree, though vanished, has left its individual trace upon us, never to depart. Through all these changes it was a pine-tree, ever a pine-tree; they but evidenced its inner nature. Such was its identity, such was its little history, of such was its exquisite style.

This is true of a pine-tree. Is it not also essentially true of an oak-tree, of a willow, of a rainstorm, of a river, of a man?

If it is true, as it would appear, that the style of a pine-tree, or any other tree, is the resultant of its identity and its surroundings, is it not equally and especially true that the style of an artist is in its essence and form the resultant of his identity and his experiences?

The style is ever thus the response of the organism to the surroundings. How simple are the surroundings and experiences of a tree. How multiple are the surroundings of a man. When his eyes are opened to them, how complex become his experiences.

How does the man respond to the gentle procreant influence of spring-time? As the pine-tree, as the oak, as the lark? Whichever it be, of such is his style. Is he stirred by the gentle and impalpable breezes that come from nowhere and are gone? Surely the pine-tree greets with delicate tremor every slightest impulse of the air. How much more is the man than a tree? how much less?

In reality the first essential condition toward a style is to be born with a subtle identity, the rest goes of itself; for one should bear in mind, and take much comfort in the fact, that there exists, in addition to himself, a very considerable universe.

It is the function of intuition, the eye of identity, the soul, to discern the identity of truth inherent in all things. It is the function of sympathy, the soul of love, to cause one's own identity to blend for the time being with the identity or inner nature of other things. It would be well, therefore, if there were choice in these matters, to be born possessed of the germs of intuition and sympathy; many are.

Many have within them somewhat of the native simplicity of the forest tree. There are not very many, and their portion is not always very great. Yet to him who has this simplicity of soul I say take hope, for to him shall be given. From him who has not this tiny impulse of faith in himself and of confidence in nature, I say from such an one shall be taken even that which he has; for all else that he may acquire is as vanity. Herein lies the difference between the real and the spurious artist; and of such is the obscure origin of art and of style.

In examining a work, for purposes of analysis and criticism, bear ever mind that no amount of dexterity, of learning, of sophistication, of trickery, can successfully conceal the absence, in its author, of sincerity. Learn, also, not only to look at a work, but into it; especially learn not only to look at nature but into it; emphatically strive to look into men. When you have learned to do these things you will live; for it is then that you will see in an art work the identity and spiritual nature of the man who produced it. He cannot escape; nor can you in turn escape. Think not

that you may for long conceal your littleness or your largeness behind ink and paper, behind pigments, behind brick and mortar, behind marble, behind anything; for to the relentless eye, searching out identities, the work melts away and the man stands forth; and so it should be.

Did you ever stop to consider that when one produces a work he plainly stamps upon it the legend: This is the work of a fool—of a trickster—of a cynic—of a vacillating and unstable spirit—of a vain and frivolous presumption—of a good heart and weak head—of a conscientious and upright man—of one who loves his fellow men—of a tender and exquisite spirit—of a large and serious nature—of a poet born—of a soul that walks with God?

For if a tree speaks to the attentive ear, if a storm speaks, if the waters speak, so then do all things, animate and inanimate, speak, and their speech is the universal language of the soul.

Take heed, then, lest you trifle, for at best we may but trifle; and thus, if you would really seek a style, search for it not altogether in books, not altogether in history, but search for it rather in the explicit reality of your own inner life and your own outward surroundings.

The Training of an Architect.*

BY C. FRANCIS OSBORNE, OF CORNELL UNIVERSITY.

IT is with great pleasure, Mr. President and gentlemen of the association, that I have come here today in response to your secretary's kind invitation, not only because I desired to make some personal acknowledgment of the honor conferred on me by my election as a member of your society, but also for the reason that I am able to convey to you the assurance of the hearty sympathy, both of Professor Babcock and myself, with this movement in which you are now engaged, and to express the hope that you will allow us to consider ourselves as being very active honorary members indeed.

I learn from your constitution that two of the principal objects of your association are: first, the promotion of the artistic, scientific and practical efficiency of the profession; and, secondly, the cultivation and encouragement of the study of the kindred arts.

Now, if I had been asked to describe as briefly as possible the aim and scope of our work at Cornell University, I do not know that I could have found any words which would have so exactly expressed the principles upon which our course of study is based, and the direction in which all our efforts of instruction have tended.

Working, then, upon parallel lines, if in somewhat different fields, it seems especially fitting that I should be able to express to you our entire sympathy with your efforts to advance the standard of our profession to a point commensurate with its responsibilities, and to offer to you, as a return in some measure for your kindness in giving us the opportunity to identify ourselves with you in this movement, the hearty, and I believe effective, coöperation of the university which I have the honor to represent. I am, indeed, authorized by President Adams, to say here today, in his behalf, that Cornell University will be always ready, through its departure of architecture, to work with you in any way on the lines laid down by your Constitution; and to further express the hope that you will consider the resources of the university, its libraries and museums, at your entire disposal for all purposes of consultation and reference, both individually and officially, in connection with the work of the association.

I have been asked to speak here today upon the subject of architectural education, to give some expression to the conclusions we have come to in the course of our work at the university, regarding the system of training most likely to produce a well educated and efficient architect. I will endeavor to do so, first stopping to make some necessary preliminary inquiries regarding the architect himself and his profession as it is today. Let us take the latter question first.

You must, I think, be aware that there are forces at work within the pale of our profession—which we are all of us compelled in some measure to recognize—which are tending to elevate the standards by which our professional capacity and work are measured, to a position commensurate with the increased responsibilities laid upon us by a more widely diffused knowledge of art, and a better feeling for good work on the part of our clients. I say that you must all be aware of the fact, for take your association to be nothing less than a visible evidence that you have all felt this impulse and are endeavoring to make a fitting response; and these forces to which I have alluded are so beyond measure irresistible that those of us who do not respond, or who prove laggards in the race, must inevitably fall out of harmony with the spirit of all that is best and most strong in the work of this generation of architects and its successors.

There seems to me to be two notable facts connected with this reformation: one is the rapid progress it has made since it first began to make itself actively felt. We need not go further back than fifteen years to make an effective comparison, and we shall not be far wrong in placing its most important point of departure in the year 1876, or in assigning as its immediate cause the international exhibition of that year. The hidden expansion of their artistic horizon on the part, not only of many members of our own profession, but of the general public as well, and the desire to examine for themselves the art treasures of the Old World, of which that exhibition gave but a faint reflection, was coincident with a recognition of the fact that our professional state was, from an artistic point of view, by no means equal to our foreign brethren, and an earnest determination to apply our new knowledge to the setting right of these matters by virtue of which resolution we are met here today.

The other notable fact to which I have alluded is this: That unlike most other professional reformations, this one in which we are immediately interested, has been brought about quite as much by the efforts of the older as of the younger members of the profession. I do not know of any way in which this fact can be made more clearly evident, than by an examination of the columns of the *American Architect* from its first number of January

*Paper read before the Western New York State Association of Architects February 7, 1888.

8, 1876, to the present day. Indeed, in that first number you will find what is, doubtless, the earliest published appeal to the profession at large to unite our purposes of self-help and improvement, and in defense of professional rights and privileges. But it is to the published designs contained in these volumes that I would more particularly direct your attention; and a comparison of the earlier with later work of the older members of the profession will show that they too have a ready response to the new demand, and so different in most cases is the earlier from the later work, that we should feel quite justified in naming them as the real leaders, did we not know how large a part is the result of the younger generation. We are spared, then, the spectacle of a profession divided against itself, of an earnest and spirited effort, on the part of the younger men, for the reform of abuses and the advancement of professional standards, met by the apathy, or active opposition of the older and less easily moved. There is no division of our ranks into radicals and conservatives, one and all, happily, of one mind and heart; fully agreed, I think, as to the best interests of our profession, and the result of such united effort cannot be for a moment doubtful.

And now for the second question: What is the architect? I think you will agree with me when I affirm that the function and duties of an architect are of a three-fold nature. He is, primarily and essentially, an artist. This is his distinguishing characteristic as contrasted with the mere builder or engineer. But his artistic skill must find expression through the medium of special materials, the nature of which again distinguishes him from his brother artists, the sculptor, the painter or the art critic. Bearing, then, these two facts in mind, the architect, primarily an artist, incidentally a constructor, let me ask your attention to a definition which, to me, is entirely satisfactory in this connection.

I would define the architect as a modeler in building materials. Let me illustrate my meaning by a definite example: An architect is called upon to design a building for a particular site under well-defined conditions. Let it be a country house, a seaside cottage, a great civic building, or what you will, the procedure of the architectural artist is the same in all cases.

Having first determined, from a careful study of the site and conditions, and guided by his artistic instincts, just what particular expression or effect his building should have, in order that it may fall into harmony with its setting, so subtle and yet so complete as to thoroughly satisfy all beholders that it is precisely the right building for the place, he will next proceed to express that vision as closely as may be, by so building up his mass and modeling and grouping its separate parts out of the materials under his hand, his stones, his bricks, his timbers, his metals, that the resulting expression shall result from a legitimate and characteristic of each separate kind of material which goes to make up the whole, which power of confidently giving material expression to his thoughts can only come from a preliminary mastery of the materials themselves.

Resting content for the moment with this explanation of my definition, I will pass on to a brief reference to the third quality which goes to make up the successful architect, that is, good business ability. Although it is true that his reputation among posterity will rest solely upon his power as an artist, the architect's financial success, in his own day and generation, will depend very largely upon his capacity for the successful transaction of such business affairs as the practical nature of his art renders necessary between his clients and himself, or on their behalf, with contractors and others.

It is important that the architect should endeavor to cultivate, as much as possible, by an extended office experience, any talent in this direction which he may possess; and although it is not uncommon to find a successful firm in which the artistic and business duties are carefully divided between the partners, his own best interests will be served if the architect can transact his own business for himself.

Having ascertained, then, the existence of three important facts as bearing upon the subject in hand, namely:

1. An intelligent public becoming daily better instructed on the whole as to sound canons of art, and fully *au courant* with the best work of the best designers in Europe, and demanding as good work or better, if it may be, from us.

2. A united profession, alert as to its best interests, and well determined that these interests be in a closer professional union and a higher standard of professional knowledge and skill; and

3. The architect himself, essentially an artist, incidentally a constructor, and preferably a man of affairs, we are in a position to justify ourselves in attempting to formulate a scheme of professional training, which shall fit the man for the place and its duties.

I can best illustrate the course of training I have in mind by supposing it to be applied to the case of an actual student, who presents himself at the age of 16 or 17, ready to be made an architect of (if it lies in him at all), as soon as may be.

Regarding him, I take two things for granted:

1. That he shall have a good English education, be able to read and write his mother tongue with intelligence and precision; have a good knowledge of geographical science, both physical and political, and shall have been so far instructed in the science of mathematics as to have mastered the ordinary processes of arithmetic and the elementary ones of algebra and geometry. Added to this, it is highly desirable that he should have had some instruction in the political history of the world, and, at least, an elementary acquaintance with those sciences which used to be included under the term, natural philosophy. I should prefer, indeed, if it were possible in this hurrying age, that he should wait a year or two longer and not present himself until he is at least 18, he would be then comparatively more mature; would have been able to carry on somewhat further the studies I have indicated; and might have acquired, in addition, the ability to read at least one modern language. At this age, too, he would be somewhat more sure in his choice of a profession, and better able to profit by the studies he is about to undertake. We will accept him, however, at the age we are most likely to get him, and will put him forward on his way as fast as his industry and abilities shall warrant.

The second fact, however, that I take for granted is so essential to his success that the absence of it would render all that has been otherwise presupposed of no account; and would warrant us in rejecting the candidate without further examination.

That is the possession of some artistic feeling and impulses, however slight they may be. Just how they ought, or are most likely to manifest themselves, it is not easy to say; as they will appear differently in different persons, but their presence or absence may be easily detected by the student himself, or by those most nearly interested in him. If present they may be developed; but if absent, they can never be imparted by any process of instruction whatever.

Assuming our candidate, however, to be well qualified to the extent I have suggested, let us take him in hand without further delay.

Let I should seem to go somewhat unduly into detail regarding the preparation and course of studies of the candidate for architectural honors, let me say that it is because the adverse criticisms to which such a course has been subjected, by those who have made no personal examination of its results, have invariably arisen from an ignorance of the real nature of the work. I have desired, therefore, to avail myself of this opportunity of making a clear explanation of our own methods so far as that is possible within the limits of a single paper.

The twofold nature of our profession suggests a division of the preparatory studies into those relating to construction and those relating to design so far as they can be separated at all. The foundation of the science of construction is mathematics. Just how far our studies in this direction should be carried will depend upon what kind of constructions are to be undertaken.

To the civil engineer having the direction of railways, bridges of enormous span and other similar structures, it is evident a very exhaustive study of the principles of applied mathematics is, to say the least, highly advisable. But for the architect who is only incidentally a constructor, whose use of materials cannot be controlled by motives of strict economy, and the strains in whose buildings are very far from being of the violent or exceptional nature with which the engineer has constantly to contend, I am quite certain that all necessary mathematical knowledge will have been gained if the student has mastered the principles of algebra, geometry and trigonometry, those will be all-sufficient for him in his subsequent work which relates to the mechanics of building and stereotomy.

In order that we may have some sound knowledge of the nature and characteristics of the various building stones, the clays and their products, and the various cements, their geographical distribution and their adaptability to the various processes of building, it is highly desirable that the student should be instructed in the principles of economic geology. To this end he must have had some preliminary instruction in chemistry. All this is so easily acquired, as is shown in our experience at Cornell University, that it seems a pity the student should lose the opportunity of acquiring information which would enable him to decide upon the value of this or that building stone, or of appreciating the meaning of such an advertisement as is now appearing in our professional journals in which the attention of architects is called to the fact that a certain very beautiful building stone is a hydro-silicate of magnesia and the truth of which assertion the student would be able to ascertain for himself from his previous work in determinative mineralogy. He would gain a similar knowledge of the various kinds of timber used in building by a similar course of instruction in economic botany; a study in this connection, too, of the structures of plant forms will be of great assistance to the student in his subsequent work in design.

To anticipate a little, I may say here that the student would have access to a large and carefully arranged collection of building materials, and especially of the various stones and woods so finished as to show their possible values as elements of expression in design.

The study of materials would also include a sufficient consideration of the various metals, paints and minor materials which go to make up the finished structure.

In construction I would begin with a study of the simpler forms, such as brickwork and masonry, arches, piers and so forth; passing later to a consideration of more complicated structures, the student drawing out for himself typical examples of each to scale.

I would next turn his attention to the preparations of working drawings. This I think is best done by having him first trace a carefully prepared and fully figured set of scale drawings for a small house, which have been first fully explained to him, and which are complete from the plan of the site to the final specification, the adaptation of each part to the particular circumstances having been especially emphasized by the instructor.

This principle of the intimate adaptation of a design to its environment should be strongly impressed upon the student from the very start, in order that he may carefully avoid that false way of thinking which imagines that a design is a design, good alike in all places, and under all circumstances. I would also have him very thoroughly instructed in all the processes of descriptive geometry and stereotomy, not only because they will be indispensable to him in the preparation of his more advanced working drawings, but also because drill of this kind is of invaluable aid in strengthening the powers of architectural composition, enabling the designer to see his forms in space before putting them on paper, and often suggesting to him special combinations which would not otherwise have occurred to him. Finally, I would instruct him very carefully in the laws of the mechanics of building construction; giving him a good working knowledge of the methods of determining strains as they occur most usually in practice, as the best way of providing for them so as to enable him to meet any problem likely to arise in the ordinary course of practice.

Special problems, involving unusual difficulties, such as roofs very wide span, as railway stations, or foundations in especially treacherous soils, and the like, requiring special experience for their solution might properly be referred to a consulting engineer, as is, in fact, the usual practice. Instructions in the principles and practice of heating, drainage, ventilating and the like, would be given in courses of lectures, carefully illustrated by

all necessary diagrams, and references to authorities as applied in the working out of the students own designs, to which I shall refer later.

This, practically, would complete so much of the course as relates more or less intimately to construction proper, so far as it is possible to make such distinction, and of the four years which is the time required for the full course, about two years would be needed for the preceding studies if they should be taught separately, in a group by themselves. As a matter of fact, however, for convenience, the studies of the two groups are made to overlap to a certain extent, and are carried on together; as it would be highly desirable to repress for two years all reference or work relating to the more essential part of the course.

As any power of composition which the architect may develop would be of little use to him unless he could communicate his ideas to others by adequately expressing them on paper, one of the first things to be learned by the student and practiced with incessant diligence throughout his course, is the art of free-hand drawing, whether with pencil, pen or brush. By the choice of good models, aided by suggestion of his instructor, who should himself have had an architectural training, the student may acquire a large fund of experience in the methods employed by the best designers to obtain desired expressions in their buildings. In connection with this work in its more advanced stages would be instruction in the principles of decoration, as applied especially to interiors.

The next step, I think, might profitably be a study of the historical development of the art of building. This is an essential or at least a very desirable preparation for the study of the art of architectural design as a matter of theoretical development, and is far more to the student than a mere exercise in archiology, for the reason that every national style or individual manner of design has grown out of some preceding style or manner, in accordance with the usual laws of development. It is also incumbent upon the student to be well informed as to what has been done by his predecessors, not only as a matter of general professional information, but more especially that he know just what problems in design have been attempted, and how far the results have been successful. I think that continual reference should be made to the contemporary political history of the people whose buildings are under discussion, in order that the student may have his attention called to the fact that the style is very largely an expression of the civilization amid which it flourished. This is a very interesting point, which I can no more than allude to here. Lantern views are of the greatest importance in the study of this subject as they reproduce, in the most vivid manner, the buildings of which it is of the utmost importance that the student should have a correct idea.

This study of the history of architecture would, of course, be accompanied by constant reference to the library, to the best use of which a good working knowledge of at least one modern language is indispensable, preferably French. By the study of the theoretical development of design, I mean a careful analysis of the various parts which enter into a design as a whole, and a consideration of the various means of expression available to the architect. The expression which results from this or that arrangement of windows, cornices, roofs, towers, and other individual features, is carefully pointed out to the student, and he is given exercises so arranged as to bring out his own power of expression in a similar way. This is a very different thing from copying a stack of motives to be reproduced in a patchwork design; on the contrary, it is a mastery of the principle involved in each method of expression, so that it may be applied originally when that particular kind of expression is again desired in a subsequent design.

To planning, very careful attention should be given as being the foundation or basis of character in design. I have so fully gone into this on another occasion, however, that it is only necessary to refer to it here.

Finally, the student should be carefully exercised in original problems, all the conditions of which are carefully explained to him, in order that he may produce a definite solution. They begin with simple motives, and are continued through two years to more important and complicated cases.

The student's mind is impressed from the first with the idea that a design, to be worthy of criticism, must be the solution of a definite problem, the conditions of which are known. Where possible, actual sites accessible to the student are chosen, in order that he may practice in completely harmonizing in his design with environment. To this end he receives certain instructions in the principles of landscape gardening. He is made to feel that what he is to do, as one phase of his work, at least, is to put such a structure in the landscape as will materially add to its general effect, and be in harmony with it. Their designs are at first very carefully worked out, but as the student masters the mere mechanical process of expression, they approximate more and more closely to sketches, rendered in pencil, ink or color, as the occasion demands. Sometimes they are entire buildings; again, they will be parts of buildings, or even details only. But the range of practice is made as wide as possible.

My paper has grown to such a length that I must be content to merely suggest the next. When the student has finished the preliminary course of training, he may do either of two things: he may go directly into an office for the purpose of learning that business of architecture, which cannot be taught in a school, or he may go abroad to observe and sketch. Both of these must be done, but the exact order of them will depend upon the individual student. At any rate, two or three years in a good office, and six months (if not more) abroad should find the student well equipped for the ordeal of independent practice. He should never forget, however, that he must always be a student, as even then when his work is finished, the amount of professional knowledge he has been able to acquire will be but a very small proportion of all that there is to learn.

In conclusion, permit me to say that this is no visionary scheme I have been describing. I have been assisting in the development of such a course of training for several years, and have seen its workings and I can affirm that it has not been wholly unsuccessful.

HEALY & MILLET, the interior decorators, have just secured the contract for the stained glass in the Trinity M. E. Church at Denver, Colorado. It is one of the largest contracts for stained glass let for some time.

The Joint Committee W. A. A. and A. I. A. on Government Architectural Practice.

Editors Inland Architect:

CHICAGO, May 8, 1888.

At your request I give your readers the following account of the work of the Joint Committee of the Western Association of Architects and American Institute of Architects on reform of the architectural practice of the United States Government.

The committee met in the rooms of the American Institute of Architects at New York, on Thursday, April 19. A bill prepared by Mr. M. E. Bell, former supervising architect of the Treasury Department, and a member of the American Institute of Architects' Committee, was discussed, and after being modified in a few particulars, was adopted as embracing all that could at the present time be secured from congress.

The committee met again at Washington on Monday, April 23, and agreed that it would be inexpedient to attempt at the present time the introduction of its bill without the cooperation of the supervising architect. The bill proposed by the committee was therefore submitted to him, and on Tuesday, by appointment, the committee met Mr. Freret at his office, and devoted the greater part of the day to a discussion of the bill, and to an examination of the management of the supervising architect's office.

We found Mr. Freret an administrative officer of the highest capacity, and found also that he was full of zeal for the reformation and advancement of the work of his office, and for the improvement of the administration of the buildings erected under his care. With that end in view, he had prepared a bill which was introduced in the House of Representatives March 24, 1888, by Mr. Dibble, Chairman of the Committee on Public Buildings and Grounds, of which bill I give you the text. (H. R. 8831, Report Number 1317, read twice, referred to the house calendar, and ordered to be printed.)

In the House of Representatives, March 24, 1888. Mr. Dibble, from the Committee on Public Buildings and Grounds, reported the following bill, relating to superintendence of construction of public buildings:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in all buildings erected under the direction of the Secretary of the Treasury, he is hereby authorized and directed to cause to be set apart, from the moneys appropriated for each building, a superintendence fund for such building, from which fund alone, and from no other moneys whatsoever, shall be paid all expenses of superintendence of construction, including local professional and clerical services, foreman, examination and testing of materials, and all local traveling and incidental expenses pertaining to the supervision of work, and reports thereon, but not including watchmen, when necessary; and the maximum amount of the said fund for each building shall be in proportion to the limit of cost of erection of such building, exclusive of the cost of site, as follows:

Five per centum of all sums appropriated for the erection of buildings limited in cost to \$50,000 or less;

Four and three-fourths per centum of all sums appropriated for the erection of buildings limited in cost to \$100,000 or less, but more than \$50,000;

Four and one-half per centum of all sums appropriated for the erection of buildings limited in cost to \$150,000, or less, but more than \$100,000;

Four and one-fourth per centum of all sums appropriated for the erection of buildings limited in cost to \$200,000, or less, but more than \$150,000;

Four per centum of all sums appropriated for the erection of buildings limited in cost to \$250,000, or less, but more than \$200,000;

Three and three-fourths per centum of all sums appropriated for the erection of buildings limited in cost to \$300,000, or less, but more than \$250,000;

Three and one-half per centum of all sums appropriated for the erection of buildings limited in cost to \$350,000, or less, but more than \$300,000;

Three and one-fourth per centum of all sums appropriated for the erection of buildings limited in cost to \$400,000, or less, but more than \$350,000;

Three per centum of all sums appropriated for the erection of buildings limited in cost to \$450,000, or less, but more than \$400,000;

Two and three-fourths per centum of all sums appropriated for the erection of buildings limited in cost to \$500,000, or less, but more than \$450,000;

Two and one-half per centum of all sums appropriated for the erection of buildings limited in cost to any sum exceeding \$500,000, or appropriated in excess of the limit of cost previously fixed by law, or where no limit of cost has been fixed by law; *provided*, that where a building is in process of erection at the time of the passage of this act, then the sum to be so set apart shall be rated as aforesaid, in proportion to the balance remaining unexpended of the sum fixed by law as the limit of cost of such building, without reference to any expenditures for superintendence incurred prior to the passage of this act.

SEC. 2. That the total expenditures at any time from the superintendence fund of any building, when compared with the total expenditure at the same time in the construction of such building, shall never exceed the percentage prescribed for superintendence of construction of such building in section 1 of this act.

It will be seen that this bill, though very far from accomplishing all that is desired by the profession, is quite a long step toward the realization of the reforms proposed by our professional organizations. Mr. Freret proposes hereafter to confine appointments to superintendentships of the different government buildings to professional men—architects or civil engineers—with whom contracts are to be made covering the period of erection of their respective buildings.

Upon the matter of causing the designs of government buildings to be made outside of the office of the supervising architect by the victors in competitions arranged specially for each particular building, we found that Mr. Freret did not agree with our committee nor with the profession at large. We believed, however, that the intentions of Mr. Freret were of the best, and were convinced that a little more experience in the management of his office would demonstrate to him the futility of his efforts to produce the highest grade of work (which he is undoubtedly striving for) when his own time is taken up with so many details of administration, and when this work is crowding on him to such an extent (there are now in hand eighty buildings, costing upward of \$21,000,000) that even were he relieved from the routine of administrative work, he would find that no one mind could do justice to the artistic requirements or solve the engineering problems incidental to such an aggregation of buildings. It is our belief that Mr. Freret is honest, ambitious and zealous, and that he will, as soon as he has felt the full force of the difficulties which beset him, conclude with us that if the national government is to secure architectural service at least equal to that engaged by its individual citizens, it must desist from burdening a single official with tasks sufficient for any twenty of the best architects in the country. We therefore deemed it expedient to postpone the introduction of the bill prepared by Mr. Bell, and amended by the committee, to a future date, when we hope Mr. Freret will join with us in our support of that or a similar bill.

Our examination of the working of the supervising architect's office was most interesting. We noted that Mr. Freret is endeavoring to award

all of the contracts for each proposed building at one letting, thereby doing away with the irresponsibility of the system heretofore in vogue, under which contracts for buildings were let piecemeal, so that the ultimate cost of a building could never be even approximately ascertained until it had been completed. We found the system of control over the work of the office an admirable one. Mr. Freret has a system of tables and records, written up each day, which show him at a glance the state of progress not only of the general drawings and specifications of each building, but the status on the evening of the preceding day of every drawing for each building, and also of the work done by each employé of the office on the preceding day. An efficient system of control over the voluminous correspondence of the office has also been introduced. Each letter sent out is typewritten in triplicate, one copy being sent to its proper address, one sent to the auditing or disbursing officer interested in the subject matter of the letter, and the other kept on file in the supervising architect's office with the papers of the particular building to which the letter relates, and finally a letter-press copy is preserved as before in the general correspondence of the office.

The following figures will give an idea of the magnitude of the operations of the office: The number of letters received within the past year is nearly 35,000. The number of letters written during the same period is nearly 30,000. Within the past ten months nearly 200 contracts have been let, and there are now in the course of erection under the control of the office over 80 buildings, aggregating in cost, according to act of congress, \$21,528,000. Besides these new buildings, there are upward of 200 old buildings, the maintenance and repairs of which are under the control of the supervising architect and require constant attention.

The committee was astonished to note the inadequacy both as to space and light of the rooms at the disposal of the office, and the insufficiency of the clerical force employed. For the immense volume of work before stated but fifty-six persons are employed in the drawing rooms, among whom are ten ladies, employed as tracers. As may be expected from this, the number and character of the drawings furnished for each building are not up to the mark of the practice of our larger and better private offices. This is due to the insufficiency of the appropriations, and not chargeable to Mr. Freret.

It is difficult to determine which is the better practice, the present one of making complete drawings and specifications of each building before letting contracts at the risk of having these too limited in number and too small in scale for efficiency of service, or the practice of preceding administrations, of making a larger number of drawings to larger scale, but leaving the office always months and sometimes a year or more in arrears with its work. Either condition of things is a disgrace to our government, and is one of the most potent causes of that disproportion between outlay and result which has become so characteristic of our government buildings.

A reform is demanded, and an adequate measure of reform will not have been secured until the Government of the United States has secured professional service for its architectural work, at least equal to that employed for the erection of the larger and better private and semi-public buildings throughout the country.

Mr. Freret has been kind enough to send me lithographic and photographic copies of the drawings of quite a number of the buildings for which contracts are now being let, and also copies of his specifications, to the inspection of which the readers of THE INLAND ARCHITECT are cordially invited.

Yours very truly,
D. ADLER.

The Indianapolis Monument Competition.

Editors Inland Architect: INDIANAPOLIS, Ind., April 28, 1888.

In your very handsome report of the entire competition for the State Soldiers' and Sailors' Monument occurs one mistake, which I take the liberty to call attention to, since it was, doubtless, only a misapprehension of facts that led to it, and because that misapprehension was quite general among architects and architectural and art journals in the early days of preparation for the competition.

In your article, on page 47 of the April number, you say, "when the first circular was issued in compliance with the law and found to outline a form of competition which the architectural profession would consider it unprofessional to enter into, and being so informed by their secretary and also by THE INLAND ARCHITECT, they recalled the circular and proceeded to ascertain upon what plan designs from the best architects in the country or in the world, could be obtained."

If you will now examine the circular referred to, again, a copy of which I inclose, you will find that it contained nothing that was afterward withdrawn (except that the limit of cost was afterward made \$200,000 instead of \$220,000). Also, that there was nothing in the circular incompatible with the code and instructions as afterward framed and issued. And, as a matter of fact, the circular was not withdrawn, but was extensively circulated, and we continued to circulate it to some extent even after it was supplanted by the perfected code, which the circular promised to those who might wish to compete.

The law required that advertisement should be made at once as soon as the board should be organized. The advertisement contained in the circular was framed only ten days after the first meeting of the board, and was only intended as a preliminary announcement. All questions as to the methods to be adopted in the competition, code, terms and information, were by the circular expressly left to be settled upon afterward, and the selection of the experts in advance was promised, and those wishing to compete were expressly referred to that future information, and told how to obtain it.

The only object I have in asking for this correction is that it may clearly bring forth two things, first, the value of care in preparing to issue information and codes for future competitions, and secondly, the importance to architects that they should not hastily form misconceptions of the intentions of committees having charge of public works, but rather await

the decisive features they may put forth after actual deliberation. Nearly all committees composed of business men actually desire to obtain designs that are good in art, and will be creditable to their authors, and those who have discerned their merits. But architects and artists who are earnest and capable are very apt to bristle with criticism and take sudden stand against measures that are adopted by such committees, because such measures seem to be founded on the main idea that business men are permeated with, that of the main chance. While it is perfectly natural for designers to protest against such measures, because of the unfortunate experiences of the past, and because they know they are false in economy, it should be remembered that business men are honest enough in believing their way is the best way, and if intrusted with a public duty on building committees they feel bound from the moment they accept that duty, to try to get as much as they can for the amount of money placed at their disposal, even if they have to establish a sort of a gambling game to do it, though it is only fair to state that they do not realize that their game is only a sort of gambling. If the architects can demonstrate a few times that it pays better to provide honest competitions, where merit will be most likely to win, it will not take long to get the business world over to their way of thinking, and so inaugurate an art era. But to do this their suggestions, arguments, criticisms and statements must be not only reasonable and temperate, but above all they must be timely. Principles may be enunciated with every force at command and cannot be too constantly insisted on. But their special application to special acts of committees already constituted, and perhaps already committed to certain courses of action, can only be effective when obviously good tempered, fair and generous, is the spirit in which they are advocated.

Very respectfully yours,

J. F. GOOKINS,

Secretary State Soldiers' and Sailors' Monument Commission.

Illinois State Association of Architects.

THE regular monthly meeting of the Illinois State Association of Architects was held Saturday, May 5, President Samuel Treat in the chair.

The following members were present: C. L. Stiles, Geo. Beaumont, Clinton J. Warren, N. S. Patton, D. Adler, R. C. Berlin, W. W. Clay, S. A. Treat, L. J. Schaub, Alfred Smith, L. D. Cleaveland, S. M. Randolph, O. J. Pierce, J. W. Root, Fred Baumann, S. J. Artingstall, city engineer, was present at the invitation of the president:

The first order of business, the reading of the minutes of the previous meeting, was dispensed with. Upon the call of the president for the report of committees, Secretary R. C. Berlin, in behalf of the Executive Committee, reported that among other subjects which came up for consideration before the committee was that in regard to permanent quarters. The committee had taken some steps in that direction, but nothing definite had been decided upon, and it was the wish to learn the views of the members that the subject was reported upon.

A brief discussion ensued, participated in by the president, Messrs. Berlin, Randolph, Root, Clay, and Patton, in which was expressed the sense of procuring permanent quarters, furnishing and decorating them, and the matter thus outlined was referred to the Executive Committee to act upon during the summer—there being but one more session in the present term—and to report at the first fall meeting to the association a plan, including costs, etc.

The President: The next business in order is the discussion of the resolution introduced by Mr. Patton at the last meeting. The secretary will read it.

Secretary Berlin read the resolution, as follows:

Resolved, That it shall be considered unprofessional conduct for a member of this association to allow anyone in his employ to do work in his own name as an architect, and this shall be construed as meaning that all architectural work done by employes, either during or outside of office hours, shall be done in the name of the firm, and the compensation for said work shall be paid to said architect or firm. If any member of this association shall violate the above resolution, it shall be considered sufficient cause for expulsion from the association. Any case accruing under this rule shall come before the Executive Committee, whose action shall be final, as provided for in cases of discipline.

The President: I suppose you all have your ideas formulated and are ready to speak to the resolution.

W. W. Clay: Mr. President, I don't know that I have got anything to say against or in favor of the resolution. It is one of those things the more you think of it the more you think it is better not to say anything about it. Of course, we all understand how difficult it is for young men to make a start in the profession, and perhaps is more keenly appreciated by those who got their start by doing a little work behind the scenes. It is something, however, that can hardly be reached unless by proper legislation, and I think Mr. Patton, in his explanation introducing the resolution, distinctly set forth this fact, and that it more than any other prompted him to make a resolution of this kind. Of course there is a question of injury, if not in a financial, yet in a professional point of view, in the fact of a young man occupying the position of draftsman doing work outside of office hours, and in my own case I prefer not to have an employé do so; yet I think an arrangement could be made between the architect and his draftsman by which the draftsman could take a certain class of work without the architect losing his client. He need no more lose a client by sending him to his employé for certain work than need a merchant in directing one of his customers to a salesman. Perhaps it would be best to refer the matter to our executive committee, with the understanding that they extend an invitation to a limited number of draftsmen, for the purpose of talking it over together, before we take any position in the matter. They would then have an opportunity to state their views; or perhaps it would be well to invite them to meet with us in the discussion, and in that way come to a harmonious solution of the question. That would be my idea. While I feel that something ought to be done to regulate this matter, I do not feel like incurring the whole responsibility.

John W. Root: I agree with Mr. Clay. I think it would be very unjust to the draftsmen to adopt this resolution without giving them an

opportunity to be heard. Personally, I am opposed to the resolution, because I think the subject can be satisfactorily arranged by private agreement. I do not think there are many draftsmen who do work outside of office hours; and so far as draftsmen cutting fees is concerned, there is no more danger from that quarter than there is from persons who do not belong to this association. Where draftsmen undertake to make plans it is ambition that impels them more than fees, and one with natural pride would not be likely to underestimate his services more than any architect of moderate practice. Very often draftsmen are given work by their friends to give them a start, and their work would not be given to their employers as it was simply given to their draftsmen to help put them on their professional feet. The only question that can seriously affect architects when their draftsmen do work of this nature is when such outside work interferes with the just work of the draftsman during his employer's hours. As far as we are concerned we have an arrangement with our draftsmen that they are not to do work outside of the office, but it is not enforced very strictly—that is, we do not go out of the way to find out whether they do or not. I do not go around to learn whether they are doing outside work, and unless I should find in the daily work of the office that they are slack, then I should feel it a ground of interference. It seems to me by insisting on such a rule as proposed by this resolution we could not expect the draftsmen to take kindly to it, and would certainly be inciting them to organize into a trades union.

Mr. Clay: What do you think of licensing architects?

Mr. Root: That is the solution of the whole question.

Mr. Clay: While it would do you no injury, the cutting of rates, it would give the man a lower standard when he made a start.

Mr. Root: As a body, we have defined our position; we have declared in a general way what shall constitute an architect as distinctly as have the medical and legal professions, but we can no more interdict the lowering of fees than we can a carpenter lowering his wages or a merchant or grocer from cutting prices, and they all do it. It seems to me that the draftsmen and ourselves are so closely allied that we must hold in respect each other's rights—the draftsman of today is the architect of tomorrow.

Mr. Patton: When I brought this resolution before the association, I did so at the request of other members, and I have no more personal interest in it than any other member. We, as a firm, are served by competent draftsmen, and we have never lost work by a draftsman getting the work. If such had been the case, I would not have come before the association with the complaint, by a resolution or otherwise. The remarks that have been made do not, as I view it, touch the real question. If it was simply a private grievance in our offices; if it was the question of a draftsman derelict in his office work, we could settle that matter quickly by discharging him. It is a question, as I view it, of the draftsman in our office doing outside work that comes in competition with men professionally in the profession. Often those who do this work help themselves to material in the offices where they work, which they have no right to, and doing the work outside are at no expense whatever. Suppose we do not care for the class of work which go to these draftsmen, there are young men, beginners in the profession, who do care, and would like to get it very much, and are, or may become members of the association. This is the question: Whether we can, in honor, allow such a competition against them from our offices, even if indirectly. In the cutting of fees we cannot reach architects who are not members of this organization, but we owe it to ourselves to protect each other. If we are not paying draftsmen enough for their services, and compel them to go outside to earn what is lacking; if this is the case, then we should pay them enough. I am not questioning the right of a draftsman to his time outside of the office, or to the use he makes of it, providing it does not infringe upon his employer's rights; but, I do think we should not permit him, knowingly, to compete with architects affiliated with us who have to maintain an office when his work is all clear profit. It may be said we have no control over the offices of members of this association; that to attempt it would be infringing upon their rights. When the draftsmen of members enter into competition with other members of the association, we have a right to enter protest. This is the ground upon which I drew this resolution. I do not care whether it is passed in this form or in any other. It is now in the hands of the Committee on Professional Ethics of the Western Association, and to have an expression of the state associations, I think desirable, on the part of that general committee. I understand the draftsmen are in arms against the resolution. I have not heard anything to this effect in our office, and I do not believe there is any general protest on their part. It is possible that some who have been in the practice of pirating on the profession may be in arms. It is very natural they should be. There are not many pirates, yet the government of the United States considers it necessary to have a law against piracy. As a class the draftsmen of this city are not piratical in their tendencies. No greater number of them are pirates than are to be found among sailors, but it has been known that draftsmen have taken advantage of their employers, stealing from their plans, copying them, making only a few alterations, and putting it out as their own work. I leave the matter just here.

The Chair: I think we should leave the matter in some tangible shape. I would suggest that the draftsmen have a meeting with us.

Mr. Clay: Mr. McLean, can you give us the feeling among the draftsmen?

R. C. McLean: Mr. Geo. Beaumont, who is a member of this association, is president of the Sketch Club, and present. He can answer you better than I.

Mr. Beaumont: I would like to say in regard to this resolution that the draftsmen have not taken the slightest notice of it, nor has it caused any ill-feeling among them. I wish to refer to what Mr. Root has said in regard to the draftsmen forming a trade union. At the formation of their association, pains were taken to select those of the highest standing, as the object for forming the association was to uphold a high professional standing. It was spoken of, and the understanding was that it was in no sense to be looked upon as a trade union, and the sentiment was, and is, averse to the views of the members of the organization, and I can assure you the

draftsmen of Chicago will never consent to commit themselves to a trade union. I think Mr. Patton wandered a little away in his remarks in regard to draftsmen taking work while in the employ of architects. If a draftsman's name is allowed to be on the door of an architect's office and he should take work outside on his own account, the offense cannot be so serious. Now, I think there is a way out of this difficulty. We might copy from the practice of the medical and legal professions by establishing a standard of requirement. In Europe—in England, France and Germany, the standard of the profession is established, and the distinction between the architect and draftsman defined. When a draftsman concludes to do work on his own account, he starts an office; and if he finds his business is not large enough to pay his expenses, he goes to his old employer and tells him he has not enough work to keep him busy all the time and will be very willing to assist him. It is the custom of old established architects to give employment of this kind, and the beginner has the opportunity to commence in a small way for himself. This is the custom in England, France and Germany, as I know by personal experience.

S. M. Randolph: Mr. President, it seems to me we are not in this discussion taking the wisest course to benefit the profession. It seems to me, sir, in place of making a point that prices should be kept up, the better way is to keep them up. Years ago I used to think it would be a good thing to have a code, but the longer I am in business the more I feel like saying to my clients, if you wish to get satisfactory work you must give its equivalent; you may get it done for less, but you cannot and get the best work. As Mr. Beaumont says, a draftsman might start out on his own responsibility, but he should get full prices. He should say to the owner, if you give me the work I can give it more time than those who are busier and give you better service; and for my part, if such an one would come to me for employment, if I had more than I could attend to, I would be glad to employ him. I have found that good service is worth all it costs. Our highest fees cannot be earned by everybody. The idea of making, as it were, a trade union by selfish ruling is detrimental to the profession. Merit alone is the true standard of prices. I remember a story told of Mr. Jenney. A gentleman called at his office and asked him what his fees were. He told him so much. "Oh," said the man, "I can get it done cheaper than that." "If," said Mr. Jenney, "you are looking for a cheap man, here is the card of a gentleman who will do it for less." I do not think we are getting one cent too much at our highest fee, and anybody who will do the work for less will either lose money or give bad service.

Mr. Patton: I don't think that touches the exact point. It is not a question of architects cutting rates. It is a question of a draftsman being able to do work at 3 per cent when an established architect cannot afford to do it for less than 5, as it is all clear gain to the draftsman, he having no office or other expenses to come out of it.

Mr. Root: I think, Mr. President, one of two things should be done: Either to ask a certain number of draftsmen to come to a future meeting and discuss the matter with us, or that the subject be left where it is, as it is already virtually in the hands of the committee of the Western Association on ethics—a competent committee with an able chairman, whose work will be thoroughly done, and you will find this subject will be amply taken care of. We had better leave that committee entirely free and unbiased. I am in favor of so leaving it, and I move you, therefore, we lay this resolution on the table. The motion, receiving a second, was carried.

The Chair called attention to the fact that he had been appointed chairman of the committee of the association on uniform contracts, which is to meet with the joint committees on the same subject of the Western Association of Architects, the American Institute of Architects and the National Association of Builders, in New York, in June, and asked for some suggestions.

A desultory talk ensued, participated in by Messrs. Pierce, Root, Patton and Baumann, on the conclusion of which the meeting adjourned.

Mosaics for Interior Decoration.

At a meeting of the Edinburgh Architectural Association held April 6, Mr. Thomas Bonnar read a paper on "Mosaics Suitable for Interior Decoration." He spoke of the arabesque style of mural decorative art, which had been associated with that of the mosaicist from the earliest times. As that form of art had been considered a charming and simple method for giving play and grace to the walls of the corridors of the Palace of the Popes, in the hands of no less an artist than Raphael and his most skillful pupils, he suggested that it ought to be accepted by them as an appropriate agent in the embellishment of the walls of modern halls and staircases. It could also be readily adapted to the more elaborate ornamentation of the walls of drawing-rooms and boudoirs without coming into undue competition with the higher art functions of framed pictures. Having referred to various examples of the mosaic art to be seen in some of the churches of Italy, he said it was pitiful to witness the feeble and mechanical manner in which these grand old mosaics were being dealt with by the so-called work of restoration now going on. He had no intention of suggesting that mosaics should be employed as mediums for the delineation of the higher or pictorial art, but he maintained that they were singularly suited for the representation of the purely decorative forms, consisting of allegorical subjects or such like, and in the treatment and embellishment of our churches, public buildings, and homes. Describing the manner in which the work was carried out, the lecturer said the method adopted by the ancients was very similar to that practiced in the present day. Among the many simpler decorative arts which were freely practiced by ladies, he would recommend the mosaicist's as being in many ways suitable. It would be found by those who handled it with spirit the most effective and capable of rewarding them with pleasure, and if successfully carried out, either in the production of natural or conventional forms, it would add a striking feature and become a useful accessory in the decoration of their homes. It might be applied to the enormous masses of black and white marble mantelpieces; for who had not got one of these unsightly objects which had to be apologized for when an otherwise picturesque room was being admired or criticized? The same sphere

for treatment was to be found in the hearth; and it could also be applied in forming a dado of variegated tints, which would answer the purpose of the ordinary wood dado and be infinitely superior as a decorative medium. Mosaic decoration should also be employed, both as regarded effect and expense, for the entrance halls, floors, walls and ceilings of the better class of houses, and in all public buildings, banks and insurance offices.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month. Annual meeting first Thursday in October, 1888. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. Next quarterly meeting, first Tuesday in June. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. G. W. Williamson, secretary. Annual meeting, November 5, 1888.

CINCINNATI BUILDERS' EXCHANGE.

A special meeting of the exchange was called last week in conjunction with the Cincinnati Chapter of Architects, regarding the mutual adoption of rules and conditions under which estimates should be submitted by contractors in the building trades. The meeting was in accordance with the report adopted at the last convention of the National Association of Builders, and the provisions of that report were considered. About one hundred members of the exchange and architects were present.

Mr. L. H. McCammon presided, and there were present on behalf of the architects President Charles Crapsey, of the Cincinnati Chapter of Architects; James W. McLaughlin, A. C. Nash and others.

Twenty-one articles were taken up, section by section, and although they met with the approval of the architects' committee, yet it was not within their province to decide upon their adoption.

The architects requested that the Builders' Exchange appoint a committee of three to meet a like committee of the architects, and they will submit a report to both branches. President McCammon appointed Amos Tooker, H. E. Holtzinger and Edward T. Livezey to represent the Exchange.

The articles considered provide for a scale of drawings, complete plans and specifications, indefinite depths of foundations, specifications to be the guide for estimating, the grouping of special work, cutting and jobbing for other mechanics, rights of lowest bidders, the compensation that lowest bidders shall be entitled to when bids are refused, the security to be

exacted, rights of sub-bidders in the hands of architects and contractors, premium on completion of contract before the specified time, award of contracts, and many other matters of vital importance to builders, architects and contractors.

The Committee on Technical Schools, Messrs. Colter, Holtzinger and J. Milton Blair, who were appointed to confer with the High School Trustees, reported progress.

The committee appointed to draft a lien law made a report that the National Association of Builders were at present considering a law that would affect all states and cities, and until they took some action the committee deemed it best not to recommend any plan. Their report was accepted and the committee discharged.

CHICAGO QUARRY-OWNERS' ASSOCIATION.

The first annual banquet of the association was given at the Grand Pacific Hotel, April 17, the stone contractors and officers of the Journeymen's Union being invited guests. The menu was excellent, and the speeches full of information regarding the stone interest, past and present. The table was arranged in the form of a keystone. John Ramle was chairman, and A. F. Shuman acted as toastmaster.

The annual meeting of the association was held April 17, and the following officers were elected for the year:

President, John Rowle; vice-president, Robert Harper; secretary, A. F. Shuman; treasurer, E. T. Malone; executive committee, C. G. Singer, E. E. Worthington, J. S. F. Batchen, John Worthy and C. B. McGinness.

BUFFALO ARCHITECTURAL SKETCH CLUB.

The club have gone into new quarters, which are fitted up very conveniently, and the meeting of the club will be held there every Friday evening. The second competition of the year has just been closed. The subject was a gate lodge, and in the opinion of the judges a very creditable set of designs were submitted.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The members of the Edinburgh Architectural Association on April 5 visited the old mansion house of Bonhard, under the leadership of Mr. Thomas Ross. Bonhard House stands on the rising ground which separates the Linlithgow valley from the Firth of Forth, at about two miles from Linlithgow. The house is a lofty, massive structure of the L plan, with a staircase, tower, and entrance in the reëntering angle. It has for many years been occupied by farm laborers. It is because of the fine plastered ceilings, enriched with moldings and ornamental devices, wood-paneled walls and fine mantelpieces, that Bonhard is so well worthy of a visit from the architectural student. Before reaching the house an old dovecote is passed, containing in a panel in its west gable all the lettered and heraldic history in stone now remaining of the old family of Cornwalls of Bonhard, who held this property for many years. After inspecting Bonhard the party visited Grange Pans House. It stands above Bonness, overlooking the Firth of Forth. The house of Grange is of a different type from Bonhard, and erected twenty-seven years later. It is a fine specimen of the kind of house built at the time when the ideas of defense against hostile attacks were just beginning to give way to those of security and comfort, retaining many of the features common to the former, such as arched ceilings of stone on the ground floor, with small openings for windows. The chimneys are of the square kind, set anglewise, of which there are only about half a dozen in Scotland. On the pediments of the dormer windows occur the initials of Sir John Hamilton, who appears to have occupied the post of master stabler to King James VI. Grange remained in the family of Hamilton till the end of the last century, when it was purchased from them by the Cadells, who have in no small degree contributed in developing the industries of Scotland, and whose descendants still retain the property.

ROCHESTER T-SQUARE CLUB.

A number of architectural draftsmen met in J. G. Cutler's office, at Rochester, New York, April 4, and formed a "T-Square Club." S. E. Hilliger was elected president, and William H. Barnes secretary.

CHICAGO ARCHITECTURAL SKETCH CLUB.

The club gave an informal reception to the members and their lady friends at the club rooms, May 4. The feature of the evening was a varied programme, which was thoroughly enjoyable, and as the first reception given by the club, was a great success, and creditable to the members of the executive committee, to whose credit its arrangement was due.

The special order of business of the regular meeting, May 7, was the reading of a paper upon "Practical Plumbing," by Mr. Martin Moylan, of the Chicago Master Plumbers' Association; but, at the request of Mr. Moylan, the reading of the paper was postponed to the next regular meeting, May 21.

Notes From Foreign Exchanges.

ACCORDING to *La Semaine des Constructeurs*, M. Jules Simon, president of the historical department of the international exposition, to be opened in Paris, next year, has outlined a novel and comprehensive style of historical exhibition, which promises to make it a particularly instructive and attractive feature. He proposes to give a sort of object lesson record of the origin, successive developments and present condition of leading products of industry. Take a book, for example. By the side of a modern specimen of the author's, artist's, printer's and binder's skill will be shown the implements employed in its production, in historic series from the rude hand press of Gutenberg to the most improved power presses of our day. Transportation will be illustrated by a historic series of vehicles and motors for the land, the water and the air. In similar manner will be presented the subjects of painting, engraving, sculpture, the military arts, etc. If it be practicable to carry out such a scheme with even approximate completeness, the result must be exceedingly interesting.

In an interesting communication to *La Revue du Genie Militaire*, a Captain Dolot appears to show that the presence of gypsum (sulphate of

lime), in building stones is prejudicial to the tenacity of lime mortars. In 1885 a number of crevices which appeared in the face of the stone wall of the enceinte, of Paris, attracted attention. Examination showed the masonry to be entirely dislocated in several portions of a wall thirteen feet thick. This wall consists of a stone facing with a backing of rubble in which a considerable proportion of gypsous stones have been used. The lime mortar, usually hard and white, has a red discoloration in some parts, and is there pulverulent and without tenacity. It was found that the mortar between two calcareous stones was always white and hard, but between a calcareous and a gypsous stone it had lost its cohesion, especially where in contact with the gypsum, while between two gypsous stones it was always pulverulent. Evidently the gypsum must either have hindered the setting of the mortar or led to its decomposition afterward. Chemical analysis showed sulphuric acid in the mortar in direct ratio with its decomposition and discoloration. It is well known that sulphate of lime is slightly soluble, and one theory is that external moisture from rains, penetrating the wall, becomes charged with this salt, and has an action on lime mortar similar to that of sea water, which is charged with a similar salt, the sulphate of magnesia. There may also be a mechanical dislocation of the hardened particles of lime mortar from the alternate crystallization, redissolving and recrystallization of sulphate of lime in the moisture which alternately penetrates the wall and evaporates in wet and dry seasons. The discoloration is ascribed to a hydrated peroxide of iron, formed through the action of the sulphuric acid in the gypsum.

Trade Catalogues.

E. C. STEARNS & CO., Syracuse, New York, are distributing from the press their illustrated and descriptive catalogue for 1888, covering the entire line of hardware specialties manufactured by the firm. Architects and builders can peruse it with profit.

THE A. A. GRIFFING IRON COMPANY, Jersey City, New Jersey, sole manufacturers of the Bundy steam and hot water radiator, has published an illustrated catalogue and price list for 1888, giving a full and complete exposition of the merits and working of this house-heater.

A. H. ABBOTT & CO., 50 Madison street, Chicago, have laid on our table, Keuffel & Esser's, of New York, a catalogue and price list of mathematical and surveying instruments, drawing materials and railroad engineers' supplies. Its 300 pages show hundreds of illustrations of instruments, among which are over 300 new designs. The catalogue is copyrighted.

L. S. GRAVES & SON, Rochester, New York, manufacturers of hydraulic passenger and freight elevators, have prepared and published a sixty-five-page pamphlet, presenting the merits of their elevators clearly and concisely, and giving the names of several hundred parties in different parts of the country who are using them.

THEODORE ALTENDER, 355 North Tenth street, Philadelphia, whose house was established thirty-five years ago, has his illustrated catalogue and price list for the ensuing season ready for distribution. It includes a full line of drawing instruments of the most approved patterns, and made in the best possible manner of selected material.

LUHRING & DIETZGEN, 115 Dearborn street, Chicago, have revised and published their catalogue for the present year, which covers all goods required by civil engineers and draftsmen, and forms a regular compendium of this class of goods. The firm are extensive manufacturers and importers of their specialties, and users would do well to procure a copy. Price, 50 cents.

NIMICK & BRITTAN, Pittsburgh, Pennsylvania, have published an expensively gotten up catalogue and price list for the season of 1888, showing the full line of door locks, latches, knobs, escutcheons, bell-pulls, sash-locks, etc., manufactured by them. The catalogue contains a large amount of information interesting to architects and builders, and would prove a convenient reference book.

J. B. JOHNSTON, 119 Lake street, Chicago, has just issued, in flexible muslin covers, a handsomely printed catalogue of builders' hardware, containing 124 pages of illustrations and reading matter, showing designs of over two hundred specialties in iron and bronze work, all easily referred to by an alphabetically arranged index following the title page. It is especially designed for architects and builders. Prices and all needful information is given.

CHARLES L. LEVY has just issued a revised and second edition of his "Electric Light Primer," being a simple and comprehensive digest of all the most important facts connected with dynamo and electric lights. In the treatment of the subject technicalities have been avoided, and anyone who can read can get a complete understanding of all that is necessary for the successful working and management of a plant. Price, 50 cents.

THE CUTLER MANUFACTURING COMPANY, of Rochester, New York, have prepared and published a pamphlet illustrative and descriptive of the "United States Mail Chute," designed for use in office buildings, whereby mail matter from the several stories of a building is deposited in a common receptacle or postoffice box situated on the main or ground floor. Comment on its utility is unnecessary. It can be seen in operation in almost every first-class office building.

BIRGE & SONS, Buffalo, New York, have originated a unique and artistic method of presenting the claims of their specialties in paper hangings, namely: in the publication of a portfolio-pamphlet, comprising six interior views, showing the application of a few of their new patterns and colorings in Berge Velours, Lacquers, Ingrains and Reliefs—the names given to said specialties. The six illustrative plates are typogravures, in imitation of water-color painting, and present, respectively, a vestibule, staircase, drawing room, morning room, dining room and bed chamber. Nothing could be more artistic in the way of harmony of coloring and adaptation of designs to the several interiors than that shown

by these plates; and space alone prevents an intelligent synopsis of the treatment of them. Happily, the press matter accompanying the plates does this effectually and leaves no question as to the artistic taste that originated the designs. The aim of this house is to prepare this class of wall decorations in sets with regard to their harmonious combination— dado, wall space, frieze borders and ceilings. Architects and house decorators will find this portfolio-pamphlet an interesting study, and as such it is commended to them.

FULLER & WARREN CO., of Troy, Chicago, Cleveland and New York, have printed for circulation a handsome little pamphlet with illuminated cover descriptive of their well-known warm-air furnace. Sixteen prominent Chicago dwellings using this furnace are given as pictorial illustrations, among them, the residences of Prof. Swing, Messrs. Geo. Hale, Orson Smith, Robert Law and W. W. Kimball, of piano fame. The names of a large number of prominent patrons and many testimonials form a feature of the pamphlet.

Our Illustrations.

Library at Quincy, Ill.; Patton & Fisher, architects, Chicago.
Houses for William Waller, Chicago; J. L. Silsbee, architect.
Observatory for the Northwestern University, Evanston, Ill.; Cobb & Frost, architects, Chicago.
Railway passenger house for C. M. & N. R. R., Rockford, Ill.; Henry Schlacks, designer and delineator.
Business block for John T. Dale and S. E. Hart, Nos. 298, 300, 302, 304, 306 Dearborn street, Chicago; Thomas Hawkes, architect.
Store building, for C. J. Hamlin, Esq., Buffalo, N. Y.; W. W. Carlin, architect. The building, which will be occupied by Barnes, Hengerer & Co., is six stories high, built of pressed brick, with brownstone trimmings. To be finished August 1.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residences, Washington, D. C.
Store alterations, 1022 Walnut street, Philadelphia, Pa.; Wilson Eyre, Jr., architect.
Residence for Nathaniel S. Jones, Lake Shore drive, Chicago; S. S. Beman, architect.
University Club House, 1316 Walnut street, Philadelphia, Pa.; Wilson Eyre, Jr., architect.
Residence for Rodman Wistars, 1014 Spruce street, Philadelphia, Pa.; Wilson Eyre, Jr., architect.
Entrance to residence of Franklin MacVeagh, Chicago; H. H. Richardson, architect. Principal floor plan in margin. For general exterior view see Vol. X, No. 6.

Mosaics.

ARCHITECT H. M. HANSEN can now be found at 88 La Salle street, Chicago.

ARCHITECT W. G. BARFIELD has removed to the United States Express building, Chicago.

MCCULLY & MILES, of Chicago, artists in stained glass, have removed to 14 Monroe street.

THE Wight Fireproofing Company, Chicago, has removed its offices to 266 Dearborn street.

ARCHITECT P. W. RUEHL has removed from Twelfth and Halsted streets to 663 South Ashland avenue, Chicago.

THE Hallowell & Bodwell Granite Company's Chicago office has removed to the Insurance Exchange building, 218 La Salle street.

THE Chicago office of the Yale & Towne Lock Company has removed to 152-154 Wabash avenue, and has been elaborately fitted up for a full display of the hardware specialties of this famous concern. A visit of inspection is well worth the time involved, and is recommended to architects.

THE TIFFANY GLASS COMPANY have just completed a colored glass window for the residence of Mr. Potter Palmer, of Chicago. The subject is "The Knights of the Field of Cloth of Gold." The window measures 14 feet long by 7 feet wide, and contains something over six thousand pieces of glass. The realistic effect of the sky and the varying reflections on the metal armors are most unusual and successful. As a study of the extended possibilities of the colors and qualities obtainable in glass, this window is most interesting. The sky, the shining steel and gold armor, the delicate silk banners, the horses and their trappings, though all actually made of simple colored glass of rich and harmonious tones, appear to possess, singly, as great a difference and true a quality as nature itself. The window has been on exhibition in New York, and is about being sent to Chicago. It is to be placed on the stair landing in the Palmer mansion.

THE attention of architects and builders is called to the great and increasing popularity of the "Climax Rail" for sliding doors, of which over seven thousand feet are now in use and giving perfect satisfaction. Those who are not acquainted with its merits should send to George F. Taylor, No. 134 Water street, New York, for a model and price list, or a model may be seen at the office of THE INLAND ARCHITECT. Notably among the fine and costly residences in which the "Climax Rail" is in use may be mentioned: Mr. Vanderbilt's residence at Newport, R. I.; Joseph H. Knapp, president Mutual Life Insurance Company's residence on Bedford avenue, Brooklyn; Millard F. Smith's new and elegant residence on Bedford avenue, Brooklyn, and many others equally noted; also in Pottier & Stynas' grand warerooms, Fifth avenue and Forty-second street, New York. So confident are the manufacturers of its perfect working that if laid according to the printed directions they guarantee it for five years, and

they specially request that those who may from any cause find it not working satisfactorily to communicate with them. It may be mentioned for the benefit of those who have a choice, that any kind of sheave suited to the rail will be furnished on order.

N. G. TAYLOR & Co., manufacturers and dealers in tin plates, terne and metals, have put a new face on their advertisement in this issue. It may be remembered, this firm received the contract to replace the old copper roof of Independence Hall with a roof of their "old style" brand of tin plate, for which they lay stress on the merit of its extra heavy coating of tin.

The United States Circuit Court for the district of New York, Judge Wheeler, has given a decision in favor of the Babcock & Wilcox Company against the Pioneer Iron Works, for infringement of their patent in building the "Zell" boilers, and we understand that the latter company have paid \$6,500 in settlement for such infringement. A similar suit against the makers of the Moore boiler is now pending in the United States Circuit Court for the district of New Jersey.

A PROMINENT house in the department of ornamental glass is that of Mr. Chas. H. Stephens, on the northwest corner of Clinton and Jackson streets, Chicago, which represents the Streater Cathedral Glass Company, manufacturers of rolled plate, cathedral and opalescent glass; also imported art, antique, Venetian and prismatic window glass, cut and plain jewels, rondels, etc.; in short, all manner of ornamental and pressed glass specialties. They will be glad to correspond with architects.

WORK is well advanced upon the main building for the Buffalo International Fair and Exposition, which is to be held on September 4 to 14, 1888, at Buffalo, New York. To give exhibitors ample time to arrange their displays, all of the exposition buildings will be completed by August 1. The exposition grounds are in the geographical center of the city, and contain nearly one hundred acres. Manufacturers and others desiring space in the exposition should correspond at once with Mr. C. W. Robinson, secretary International Exposition, Buffalo, New York.

A SASH pulley recently noticed in the architect's offices is called the Norris No. 00406. It has a half inch tempered pin, turned perfectly noiseless wheel and a cover over the wheel that makes it impossible for the rope or chain to leave the wheel. In our opinion the pulley has no equal, and we think the architects of the country generally agree with us. We see by the advertisement of C. S. Norris & Co., page XIX, that they manufacture a greater variety of pulleys than any other house in the country. They are one of the oldest hardware houses in the United States. They make over 1,600 different qualities.

An invention named after its inventor and known as McClellan "anti-syphon trap vent," wherein mercury has been utilized as a "seal" is attracting attention. In this device the air enters through an open thimble, extending upward, and the opening is closed by an inverted cup whose edges dip down into an annular groove containing the mercury. When there is a partial vacuum in the pipe this cup, which is very light, is lifted out of the mercury by the inflowing air, and drops back again the instant the demand for air ceases. There are many claims of advantage for this method over traps in general use, such as dispensing with long lines of vent pipes, convenience of inspection, drawing the air in on the sewer side of the trap and from the air of the room, instead of from cold air of the outside of a building, etc., for which the interested must refer to the manufacturers.

Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, May 5, 1888.

Business men generally stated at the beginning of the year, that less business would be done this year and at smaller margins than last year, and for four months business management has been conducted with this thought uppermost. A moderate restriction of activity has been maintained in nearly all manufacturing, building and trade channels. Future requirements have been provided for with caution. The declining tendency in prices which set in early in the winter has continued ever since in a few channels. In some, prices have been stationary, as for instance, in lumber, brick, glass and building and railroad equipment, generally. In iron, in textile goods, in hardware, of staple varieties, the tendency is downward, and the considerable curtailment of production has not checked that tendency. The probabilities are that the limit has been reached, and that confidence will revive. Consumers generally have very little stocks, from the shop retailer to the railway manager. Warehouses are not overstocked, cereals are not in over abundant supply. Iron products of all kinds are pretty well cleared up. Distributors have nothing but what they can carefully handle. Lumber manufacturers are busy, manufacturing and shipping, and they find ready markets west and east for their full production. Sash, door and blind manufacturers have made common cause for good living prices west and east, and will quite probably maintain them. Shingle manufacturers hope to be able to do so, but the production south, east and north promises to be somewhat heavier this year than last, without a corresponding expansion in demand. The expanding western demand for lumber promises to keep the trade in a healthy condition all year. The iron trade has suffered, and from present appearances last year's phenomenal activity in railway building will not be repeated this year. Reputable authorities guess at a falling off this year of 5,000 miles in railroad construction, namely, from 13,000 miles of main track to 8,000 miles, but this is only a guess. The last half of the year will probably develop a good deal of latent railway building enterprise. Even if there should be such a drop, other sources of demand will spring up of a compensating nature.

Building material generally is selling at about last year's prices. Brick contracts so far as they indicate probabilities, point to a busy building season in nearly every large city. Advices from a number of large towns warrant the same conclusion. In country localities and small towns there will be greater building activity than last year. Manufacturers are everywhere casting about for the cheapest and best location with regard to fuel transportation and labor. Natural gas centers are attracting many. Cheap coal developments are inducing many old and new concerns to locate where coal is cheaper. Water power attractions are not lost sight of. Extravagant municipal taxation, overbearing labor domination in some places, and other causes are working to make it an object for many to seek new and cheaper locations. This movement is drawing in its

train a great deal of enterprise, in which the building trades will largely participate, and which architects and builders are perhaps more cognizant than others.

The building trades have had a fair, though, as yet, not a crowding season. The coöperation of employers in a strong organization, accompanied with the offer of friendly coöperation with labor for the adjustment of differences and the maintenance of friendly relations, has done much to secure uninterrupted work. The new labor policy of education and the development of more friendly relations between employers and employed, will not be without its beneficent features and results. Throughout the New England and the Middle States there is very little idleness, but just enough to make discretion, so far as strikes are concerned, the better part of valor. A great deal of engineering work is projected west and east, in the way of railway terminal facilities, rapid transit schemes, pipe lines, and so on. Bridge work will be abundant. House building, especially of smaller houses, will not fall below last year, taking the entire country into account. Builders in several of the larger western and northwestern cities have engaged themselves to do a large amount of such work. New York City is falling behind the record. Philadelphia expects to make as good showing as last year. Pittsburgh is quieter than a year ago. Cleveland building activity is not quite so pronounced. At Cincinnati there are prospects for considerable new work. It is in the interior towns of the Ohio and Mississippi Valley regions that the most healthful evidences of building activity are found. Taking the situation all through there is cause for congratulation that the trade manufacturing and industrial conditions are as fair as they are.

Synopsis of Building News.

Buffalo, N. Y.—Architects M. E. Beebe & Son: For A. F. Coatsworth, two-story store building; cost \$8,000. For George Jones' Sons, four-story factory building, 50 by 150 feet; cost \$10,000. For G. T. Williams, four-story building, 42 by 130 feet. For J. M. Richmond, four-story building, 80 by 120 feet.

Architect W. W. Carlin: For C. J. Hamlin, six-story store building, 80 by 140 feet. Architect F. W. Humble: For St. Stephen's parish, stone church building, 65 by 165 feet; cost \$50,000. For Frank Monen, six-story store and flat building, 26 by 60 feet; cost \$6,000.

Chicago, Ill.—Architects Edbrooke & Burnham: For A. A. Paddon, two-story frame residence; cost \$6,500. For John Hall, three-story flats, 23 by 82 feet; cost \$10,000.

Architects Burnham & Root: For Burley & Co., store front, etc.; cost \$60,000. For J. R. True, flats; cost \$20,000. For M. Meyer, residence, to cost \$50,000. For J. J. Hoch, residence, to cost \$15,000.

Architects Handy & Cady: For J. J. Palmer, two two-story dwellings, 38 by 56 feet; cost \$6,500.

Architects Thiel & Lang: For F. Voltz, three-story store and flats, 33 by 68 feet; cost \$7,000. For A. Malewski, three-story flat building, 24 by 64 feet; cost \$9,000. For S. T. Petrowski, four-story flat building, 25 by 74 feet; cost \$12,000. For John Uthes, two-story flat building, 21 by 53 feet; cost \$7,500.

Architects E. Baumann: For Wm. Waller, four-story flat building, 40 by 75 feet; cost \$20,000. Christian Zuber, three-story store and flats, 23 by 67 feet; cost \$7,000.

Architect Louis Martins: For Mrs. Tegmeyer, two-story flat building, 35 by 47 feet; cost \$10,000. For J. E. Woodruff, nine stores and flats, 192 by 86 feet; cost \$65,000.

Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall. The business situation here is hard to describe, inasmuch as there is a great variance of opinions, some being favorable for a moderately busy season, others contrarywise. The painters' strike has not proved as formidable as expected, and almost "died a bornin'." Some of the bosses have acceded to their employees' demand, while others refused to listen. Edward Atkinson's statistical works on strikes, their causes, losses, etc., deserve the widest promulgation and study, alike by contractors and their hands. Hard, cold, yet true and incontrovertible facts are presented in clear, forcible language. The rules on bidding as formulated and adopted by the National Association of Builders came up for discussion at a meeting of our Builders' Exchange, and the rules referred to a committee from that body, and architects to examine and report back their views to the exchange. The excavating for our city hall is going steadily along, and the work of laying the foundations will begin as soon as possible. Work on the armory is also progressing. The younger members of the craft have formed what promises not only to be a healthy organization, but also a most beneficial one, namely: "The Architectural League of Cincinnati," of which A. O. Elzner, is president and John Zettel, secretary. It is a genuine pleasure to wish them unbounded success with the injunction to build wisely and well.

Architect Emil F. Bande reports: Building new addition and remodeling old buildings of H. F. Busch, to cost \$10,000; made plans for a three-story pressed brick front store and dwelling for Geo. Loew, to cost \$6,000; made plans for brick store and dwelling for Geo. Schroer, to cost \$4,000. He is also the architect of the First German Reformed Church, now in course of erection on Freeman avenue, between Findlay and York streets. The vestibule will be 36 feet high, stained glass windows, furnace heat, and wood floors and slate roof; also, plans for a two-and-one-half story dwelling house to be erected on Russell avenue, Eden Park, for Joseph Basch. It will be built of frame and shingling, have pine finish inside, inside blinds, iron and wood mantels, galvanized iron cornice and tin roof. The building will cost \$3,200.

Architect Gustave W. Drach is engaged on plans for a double two-story and attic dwelling house, to be erected in Clifton, Ohio, for L. A. Stroble, of Elm and Canal streets, this city. It will be built of brick with stone trimmings and plaster work, have yellow pine finish inside, slate and wood mantels, inside and outside blinds, bathrooms, water-closets, laundries, hot and cold water attachments, slate roof and all modern improvements. It will cost about \$7,000; also plans for a two-and-one-half-story dwelling and schoolhouse combined, to be erected in Avondale, for Miss Sarah Armstrong. The house will be built of frame and shingling, have yellow pine finish inside, inside blinds, bathrooms, water-closets, laundries, furnaces, galvanized iron cornice and tin roof. It will cost about \$6,500; also, store and flat building, for John Manns, Esq., on Price Hill. The upper floor to be used for I. O. O. F. Hall. The building is to be of brick, and three stories high.

Architect Theo. A. Richter has prepared plans for a two-and-one-half-story dwelling house, to be erected on Price Hill, for W. B. Morrow. It will be built of brick with stone trimmings, have inside finish of hard and soft wood, iron and slate and wood mantels, inside and outside blinds, bathrooms, water-closets, laundries hot and cold water attachments, slate roof, pinnacle spire, iron railings and modern conveniences. The building will cost between \$5,000 and \$6,000.

Architects Sam'l Hannaford & Sons have their time well employed, and are engaged upon the following plans: Residence for D. L. Baumgardner, to be built of brick and stone and contain twelve rooms, slate roof and hardwood finish. Residence for Mrs. Mary A. Wolfe, of brick and stone, twelve rooms, tin roof and pine finish. W. P. Anderson, Esq., city, will build at Watch Hill, R. I., a summer cottage of ten rooms. Lewis Van Antwerp, Avondale, will build a residence of half timber and brick, to contain twelve rooms, slate roof and hardwood finish.

Architects Crapsey & Brown have their hands full on foreign work. In Winchester, Ky., they have drawn plans for a medium-sized hotel, with elevator and modern improvements, containing about one hundred rooms and will be built of brick.

Architect S. E. Des Jardins has the following plans under way: A store building for John Breen, at Loogootee, Indiana, to be of brick; size 35 by 55 feet; cost, \$5,000. A residence for J. E. Smith, same place, to be of frame, eight rooms, shingle roof; cost, \$3,000. Depot at Norwood, Ohio, frame, 16 by 50 feet, slate roof and sheathed inside with yellow pine.

Architect Jas. W. McLaughlin has drawn plans (the contracts are signed), for a mansion for Jos. Bohm, Esq., of brick with cutstone trimmings, slate and wood mantels; cost, \$16,000.

Cleveland, Ohio.—Architect Edward Schwabe has prepared plans for Mrs. G. Halmnorth, four-story brick block, 45 by 65 feet; cost, \$12,000. For H. P. McIntosh, four-story frame building, 50 by 115 feet; cost, \$18,000. For O. E. Gehring, two-and-one-half-story dwelling, 40 by 60 feet; cost, \$8,000. For Moses Koch, two-and-one-half-story dwelling and barn; cost, \$15,000.

Columbia City, Ind.—Architects Wing & Mahurin, of Fort Wayne, are preparing plans for a two-story brick school building, 140 by 100 feet, slate roof; cost, \$20,000.

Detroit, Mich.—There is a slight dropping off just at present in new work, though actual building operations are lively and the outlook seems good.

Architect Gordon W. Lloyd: For S. D. Miller and the Detroit City Railway Co., five-story brick and stone stores and offices, 74 by 100 feet; cost \$30,000; M. Blay, mason; Clark, Vinton & Co., carpenters. For Tranggott Schmidt, two-story brick and stone dwelling, 32 by 80 feet, slate roof; cost \$10,000; A. Albrecht & Son, builders.

Architect A. C. Varney: For F. Simmons, three-story brick and stone double dwelling, 44 by 60 feet, gravel, tin and slate roof; cost \$9,000; W. H. Hollands & Son, builders. For Mrs. W. H. Boden, two-story brick and stone double dwelling, 31 by 62 feet; cost \$4,500. For Mrs. J. D. Baer, two-story brick and stone double dwelling, 36 by 68 feet, slate roof; cost \$6,000; W. H. Hollands & Son, builders. For H. Strassburg, three-story brick and stone double dwelling, 31 by 73 feet, slate and gravel roof; cost \$7,500; John Finn, builder. For H. Zitell, two-story brick and stone double dwelling, 30 by 58 feet, slate roof; cost \$4,500; W. H. Carpenter, builder. For Charles Baxter, two-story brick and stone double dwelling, 25 by 62 feet, gravel and slate roof; cost \$4,500. For G. W. Loomer, two-story brick and stone double dwelling, 27 by 62 feet, gravel and slate roof; cost \$4,500. For Mrs. Jaquette, two-story brick and stone double dwelling, 38 by 60 feet, tin and slate roof; cost \$7,500. For J. A. Jones, two-story brick and stone barn, 46 by 100 feet; cost \$6,000; Martin School, builder. For Allen Bros., block of six three-story brick and stone dwellings, 80 by 62 feet, slate, tin and gravel roof; cost \$20,000. For W. H. Boden, block of three two-story brick and stone stores, 60 by 60 feet; cost \$5,000. For B. Johnson, two-story brick and stone dwelling, 24 by 43 feet; cost \$2,500.

Architects Scott & Co.: For Michigan Radiator Company, two-story brick shops, 214 by 350 feet; cost \$30,000; Henry Carew, builder.

Architects Mason & Rice: For Detroit Gas Company, two-story brick works, 41 by 81 feet; cost \$3,500; Henry Carew, builder.

Architects Spier & Rohns: For G. Stenton, two-story brick and stone double dwelling, 42 by 63 feet; cost \$7,000; Wm. Reich, builder. For First German Baptist Society, two-story brick and stone church, 77 by 81 feet; cost \$13,000; Wm. Reich, builder.

H. W. Holcomb is building a two-story brick and stone dwelling, 25 by 44 feet, slate roof; cost \$4,000.

Architect Geo. W. Myers: For H. M. Kittle, two brick and stone dwellings, 20 by 42 feet, slate roof; cost \$4,400; Mr. Helms, builder.

Architect Hugo Bloggelle: For Herman Merker, two two-story brick stores, 40 by 50 feet; cost \$3,500; Jno. Schrage, mason; Mr. Dewey, carpenter.

Candler Bros. are building three two-story frame dwellings, 35 by 39 feet; cost \$4,500.

Architects Hess & Raseman: For United Presbyterian Society, two-story brick and stone church, 96 by 120 feet, slate roof; cost \$20,000; M. Blay, contractor. For J. T. Shaw, two-story brick and stone store building, 40 by 60 feet; cost \$6,000; Jno. Schrage, mason; Hanens & Lange, carpenters.

Architect W. G. Malcomson: For A. B. Sears, two-story brick and stone dwelling, 30 by 57 feet; cost \$4,800; F. Julien & Co., builders. For John Pettie, two-story brick and stone dwelling, 20 by 38 feet; cost \$2,000; J. E. Boomer, builder.

Architect A. E. French, for Hudson & Baisde, three-story brick and stone double store building, 36 by 60 feet; cost \$6,500.

Architects Donaldson & Meier: For David Ward, two-story brick dwelling, 36 by 62 feet, slate roof; cost \$12,000; Topping & Fischer, builders. For Wood Alcohol Co., two-story brick, frame, and iron factory building, 24 by 30 feet; cost \$3,400; Thos. Sherk & Co., builders.

Architect E. W. Arnold: For C. C. Blodgett, block of twelve three-story brick and stone dwellings, 107 by 138 feet; cost \$60,000.

S. A. Buchanan is building a two-story frame dwelling, 40 by 57 feet; cost \$7,000.

R. Helson is building a block of three two-story brick and stone dwellings, 36 by 68 feet; cost \$9,000.

H. W. Raper & Co. are building a block of three frame dwellings, 24 by 40 feet each; cost \$8,000.

Permits were issued during the month of April for 339 new buildings to cost \$537,145. Alterations, etc., 71; cost \$42,720; total \$579,865.

El Paso, Tex.—Architects Stewart & Carpenter: For Wells, Fargo & Co., three-story stone, brick, and terra-cotta bank building; cost \$25,000; under way. For J. Scheffelin, block of brick and stone residences; cost \$30,000; alterations and third story addition to "Bank Block"; cost \$9,000.

Ft. Wayne, Ind.—Architects Wing & Mahurin have prepared plans for a two-story brick and stone store building, 40 by 60 feet; cost \$5,000, to be built in Van Wert, Ohio; also a frame cottage to be built in Jackson, Mich., to cost \$3,000.

Haughville, Ind.—Architect Chas. G. Mueller of Indianapolis, has prepared plans for a three-story frame hotel, to be erected here.

Highland, Wis.—Architect A. Druiding, of Chicago, Ill., has prepared plans for a stone church for St. Joseph's Parish, 50 by 108 feet; cost \$18,000.

Huntington, Ind.—Architects Wing & Mahurin, of Fort Wayne, have prepared plans for a two-story brick school building, 86 by 58 feet, slate roof; cost \$10,000.

Kansas City, Mo.—Architect A. H. Ramsden has plans for a fine residence, to be built of Scotch granite and Massachusetts stone. Also for an office building, to cost \$40,000, and an apartment building, to cost \$150,000.

Architect C. B. Lakin has plans for A. G. Berlinder, for a private hotel building, to cost \$30,000.

Architects Knox & Guinotte have prepared plans for the Commercial Bank building, three-stories high; cost \$15,000.

Architects Vrydag & Shepard have prepared plans for an apartment building with one hundred and fifty rooms, to cost \$225,000.

Architects W. W. Polk & Son are preparing plans for an office building, to cost \$500,000.

Architect B. H. Brooks has prepared plans for W. J. Anderson, for a double residence, to cost \$18,000.

Architect E. F. Fassett has prepared plans for Col. A. B. McGee, for a brick and stone residence, to cost \$18,000.

Architect Herman Probst has prepared plans for a \$60,000 block, to be built this season for Mr. Chadwick.

John Owens will build a five-story office building, to cost \$75,000, on Wyandotte street, near the Board of Trade.

Architect M. J. Schofer has plans for a block of thirteen houses for an eastern syndicate, to cost \$100,000.

Among the building permits recently issued are the following, which call for an expenditure of \$5,000, or over: A. L. Mason, five-story brick business building, 48 by 112 feet; cost \$50,000. G. W. Toulmin, two-story brick business building, 75 by 40 feet; cost \$50,000. A. W. Carroll, seven two-story frame residences, 24 by 48 feet each; cost \$14,000. Spencer & Otto, four two-story frame residences, 21 by 43 feet each; cost \$12,000. Charles Barnhart, three two-story frame dwellings, 18 by 38 feet each; cost \$5,400. W. E. Robbins, four two-story frame dwellings, 21 by 42 feet each; cost \$7,200. W. C. McKay, two brick residences; cost \$15,000. W. Diehl, four frame residences; cost \$10,800. G. A. Hefflin, seven frame residences; cost \$10,500. R. S. Rodgers, two brick residences; cost \$6,000. R. B. Canine & Co., eleven frame dwellings; cost \$33,000. J. J. Kelley, block of twelve brick dwellings, 16 by 34 feet each; cost \$70,000. A. W. Dowden, four brick stores and tenements; cost \$17,000. E. W. Culver, two-story brick residence, 38 by 58 feet; cost \$12,000. W. H. Caffery, two brick residences; cost \$8,000. Lewis George, four frame dwellings; cost \$5,000. Julius Herold, three brick business buildings; cost \$10,000. Coates & Webster, remodeling Coates House; cost \$12,000. Vaught & Hudgens, two brick business buildings, cost \$5,000. J. B. Atkinson, two brick residences; cost \$10,000. Geo. D. Heuling, six brick buildings; cost \$8,000.

Little Rock, Ark.—Architect Thomas Harding: For J. M. Moore, two-story brick and granite residence, 54 by 84 feet. Tiling, ornamental brick, hardwood finish; cost \$12,000; contracts not let. For Dr. Southall, brick residence, 52 by 65 feet; cost \$8,000; contract not let. For L. B. Leigh, two-story brick residence, 47 by 70 feet; cost \$7,000; contracts not let. For W. Turner, two-story brick business block, 140 by 70 feet; cost \$12,000; contracts not let.

Architect B. J. Bartlett: For Athletic Association, brick boat house, natatorium, gymnasium, etc., 60 by 150 feet; cost \$10,000. F. J. H. Rickon and B. J. Bartlett associate architects for Mrs. A. Savage, two-story frame residence, 50 by 50 feet; cost \$3,000. B. J. Bartlett, architect. For E. C. Homer, cottage; cost \$3,000. At Helena: For Newman & Son, two-story frame residence; cost \$7,000. For C. W. England, block of brick stores, 75 by 120 feet; cost \$12,000. For Little Rock County Hospital, pavilion plan, frame building; cost \$15,000.

Logansport, Ind.—Architect Chas. E. Mueller, of Indianapolis, has prepared plans for a four-story brick and stone opera house for Mr. Kranceberger.

Lonoke, Ark.—Architect B. J. Bartlett, of Little Rock. For Lonoke Hotel Company, two-story brick hotel, 43 by 64 feet; cost \$7,000.

Oil City, Pa.—Architect A. Druiding, of Chicago, Ill., has prepared plans for St. Joseph's Parish, for a brick and stone church, 64 by 150 feet, slate roof; cost \$60,000.

Omaha, Neb.—Architects Fowler & Biendorf: For T. V. Bonner, business block, with all modern improvements. For James Kirner, double frame tenement house; cost \$5,000.

Architect Sidney Smith is preparing plans for Madis Bros., for a large office building.

Owatonna, Minn.—Architect O. G. Traphagen, of Duluth, has prepared plans for a two-story brick school building, to be built soon.

Richmond, Ind.—Architects Wing & Mahurin, of Fort Wayne: For Fort Wayne Jenney Electric Light Works, three-story brick factory, 40 by 125 feet, slate roof; cost \$6,000.

Riverside, Ala.—J. R. Coleman has prepared plans and is building for himself a three-story frame, 40 by 100 feet; cost \$10,000.

Sedamsville, Ohio.—Architect A. Druiding, of Chicago, Ill., has prepared plans for St. Mary's Church, 50 by 135 feet; cost \$21,000.

St. Louis, Mo.—Architect Thos. Walsh has prepared plans for a five-story brick and stone store building, 225 by 25 feet; cost \$25,000.

Architect T. B. Annan: For Prof. J. M. North, frame residence, 45 by 48 feet; cost \$4,000.

Architect E. C. Jaussen: For Herman Krutsch, brick and stone dwelling, 31 by 38 feet, slate roof; cost \$5,000.

Architect Charles May: For F. H. Vick, two-story brick dwelling, 17 by 49 feet; cost \$2,000.

Architect Aug. Beinke: For A. Mack, two-story stores and flats, 44 by 66 feet; cost \$7,000.

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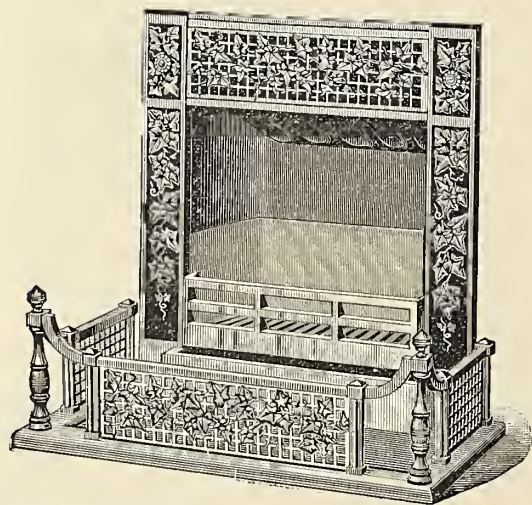
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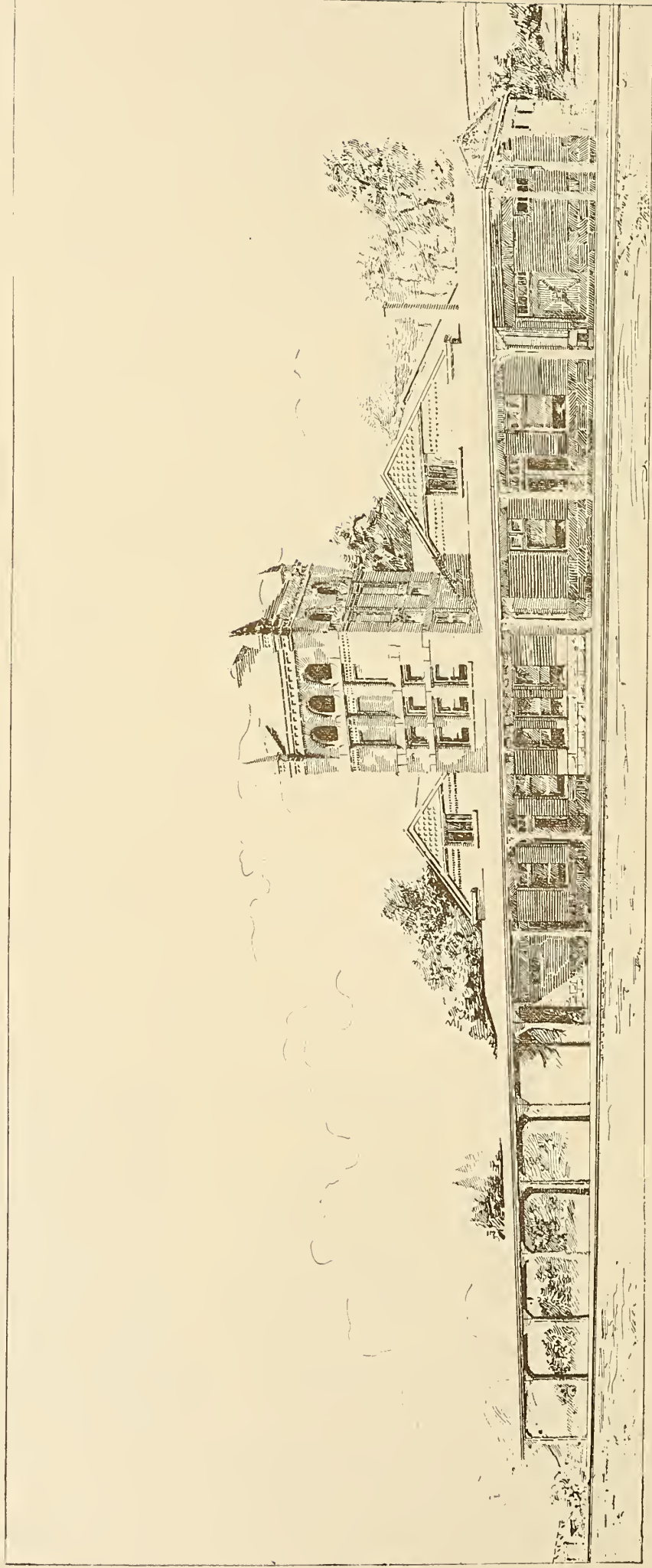
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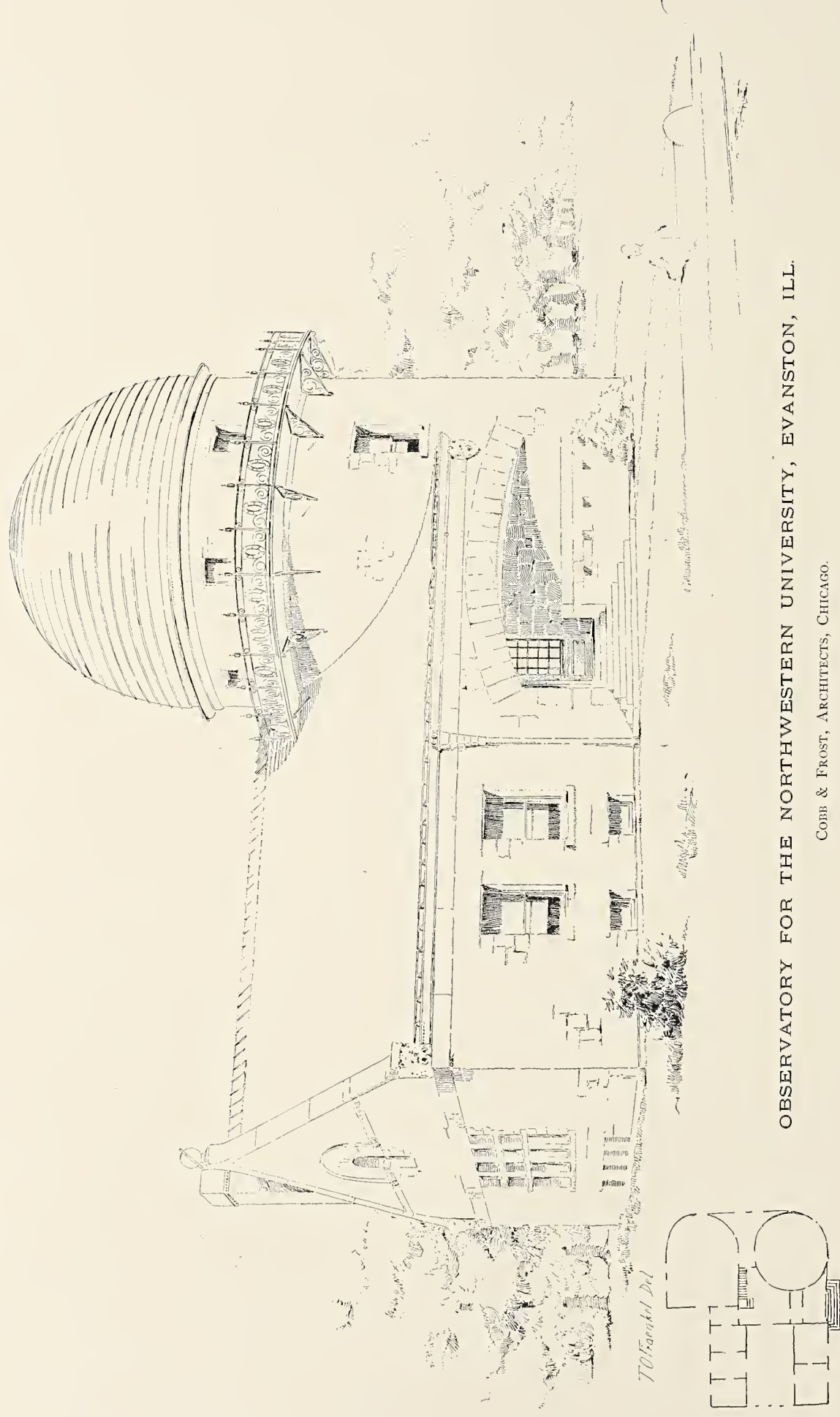
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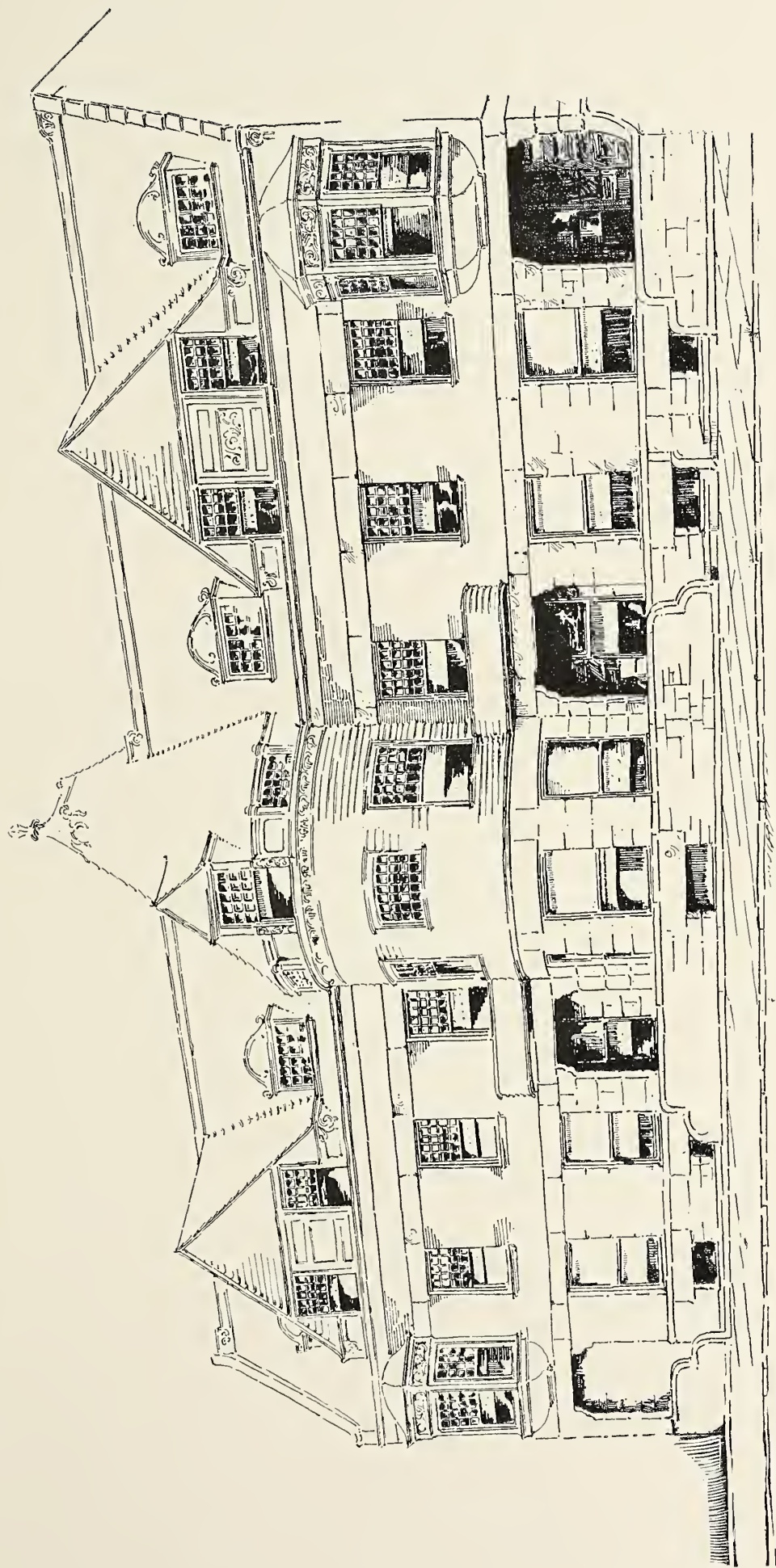


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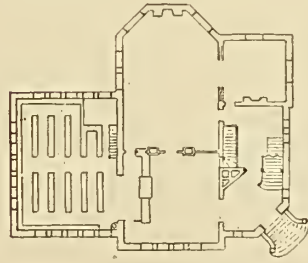
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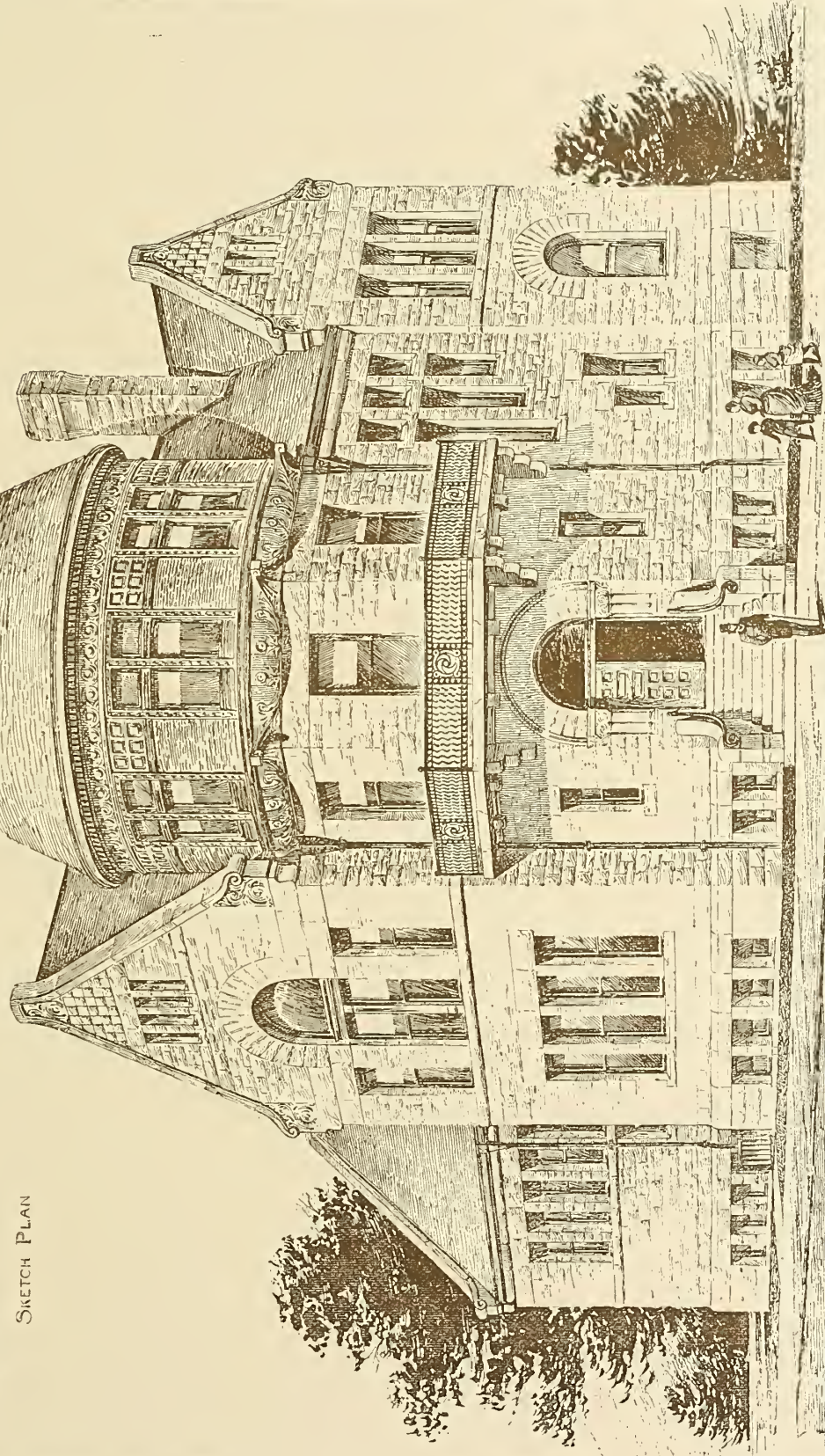
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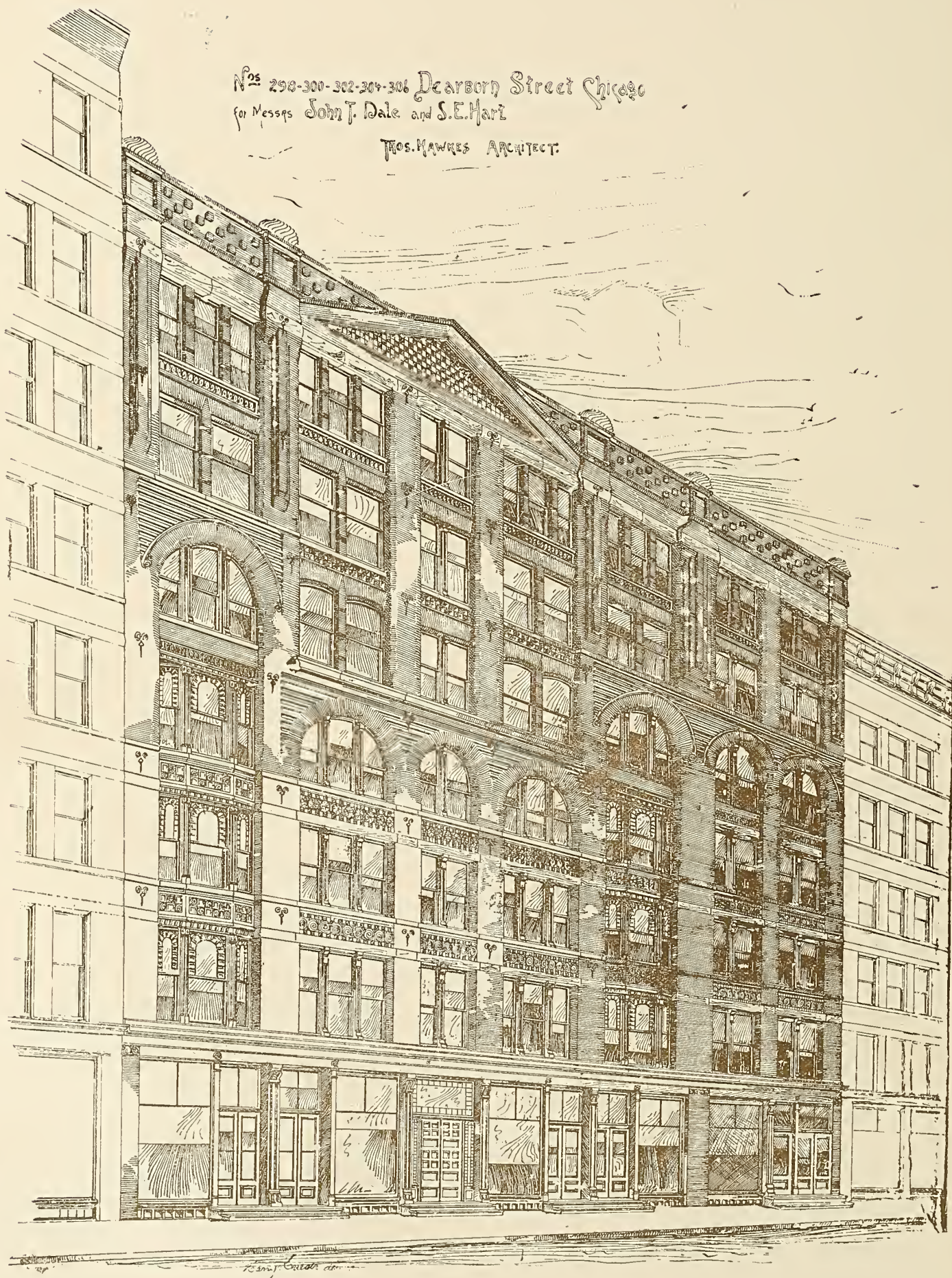


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A MEETING of the Board of Directors of the Western Association of Architects, was held at Chicago, May 30. There were present: Secretary N. S. Patton; Chairman John W. Root, George B. Ferry, Walter R. Forbush, and J. J. Flanders. It was decided to issue a certificate of membership to architects in good standing for the current year. An amendment to Article XII of the by-laws will be submitted to the next convention, providing that all committee meetings involving expense to the association must be approved by the Board of Directors, who shall determine the proper allowance for expenses. The board passed a resolution indorsing the action of the American Institute of Architects in regard to the bill now before congress, calling for the payment of money due the estate of the late Thomas U. Walter, for services rendered the government in the construction of the Capitol building. A large amount of minor matters occupied the remainder of the session.

ARCHITECT Charles A. Alexander, of Chicago, died at New York, May 21. Mr. Alexander was an Englishman by birth, and though he practiced his profession in Chicago for sixteen or eighteen years, he was comparatively little known to his brother architects, as in disposition he was extremely reserved. Of his work there are several good examples in Chicago, such as the residences of Wirt Dexter, T. W. Harvey, Edwin Walker, and that of Mr. Huntington, northwest corner of Michigan avenue and Sixteenth street. His practice also extended over the West and South, and was scholarly and effective, showing close study and considerable architectural talent.

THE death of General Q. A. Gilmore, one of the most celebrated civil engineers of the age, closes a life that has been more or less closely connected with much of the vast progress that has taken place in this country during the past thirty years, and no history of our engineering achievements can be written in which the bright intellect of that gentleman is not conspicuous. As an author, General Gilmore was no less active. He was one of those earnest and industrious spirits whose whole efforts were bent on increasing the real knowledge of the world. His investigations have added much to our knowledge of limes, and of the strength of stones, bricks, etc. He spared no pains in doing his work well, and, like all really valuable original work, the labor of months, if not of years, could be expressed in a few pages. Someone has written that the crying necessity of the hour is a society for the suppression of useless knowledge. Whether this be so or not, there is scarcely a doubt but that a society for the suppression of useless books is greatly needed. It has become too much the habit for persons who have made no investigations, experiments, or even thoroughly understood a subject, to air their ideas in print, and to imagine that they have done the public some service, whereas they have only added to its difficulties. Everyone who has accumulated any number of books on a subject learns that the larger number of them might be readily dispensed with, since their authors have made no original investigations, and have therefore added nothing to the knowledge of the subject, but rather have helped to encumber the ground and made it more difficult to ascertain the truth. It may well be said that anyone who now writes without having something original to say, is guilty of a crime. General Gilmore was an original investigator, sparing no pains to attain accurate and definite information on the subject under consideration. He may well be taken by young men as an example worthy of being followed.

A LETTER which should receive general recognition, and the consideration of architects, has been sent out by Architects Charles Crapsey and H. E. Siter, of Cincinnati, the committee appointed by the Cincinnati Centennial Exposition managers to take charge of an architectural exhibit. The letter is as follows:

DEAR SIR,—The undersigned have been appointed by the commissioners of the Cincinnati Centennial Exposition as a committee to secure an architectural exhibit, and this exposition will afford an opportunity to the profession of showing a great multitude of people from various states what is being done in the way of modern building. The fine exhibit that was made by the Western Association in this city, last November, did much toward advancing the profession in the eyes of the general public, and the coming exposition will afford greatly increased means of furthering the same ends.

The express charges, both to and from the exposition, will be paid by the commissioners; the drawings will be handled with the greatest care, and the best judgment of the committee will be used in making a proper display. If you favor this enterprise, and will become a party to the same, a postal card addressed to the chairman of the committee will place your name on the list for future circulars.

Very respectfully,
CHAS. CRAPSEY,
H. E. SITER,
Committee on Plans.

Box 776.

That architects can benefit the profession by placing before the public what is best in design is beyond question, and every opportunity of this kind should be made use of for public education. It is largely through this ignorance of the public in regard to what is correct and tasteful in design, that has given to this country so much that is mediocre or worse in the way of design, for if the public would not accept that which violated all principles of architectural design, let alone good taste, the designer would feel called upon to educate himself, and the character of our structures, both public and private, would be greatly advanced. The public would learn that because a building did not involve a large sum in construction it need not necessarily be badly designed, and mere business talent would not hold so large a place in successful practice as at present. One thing that should be guarded against by the committee in charge of the exhibit is any attempt to use this exhibit as an advertisement, and a selection of the designs sent in should be made so that nothing but creditable work would receive a place in the exhibit. We thoroughly indorse the enterprise, which cannot fail, in the hands of architects of the professional standing of the committee, to be in every way creditable if a thorough support is received by them from the members of the architectural profession.

AT the suggestion of the Buffalo Architectural Sketch Club, the different clubs of architectural draftsmen are contemplating the formation of a league by which the different clubs could enter into general competitions, encourage the formation of new clubs, and, in a general way, advance the interests of draftsmen. While the work of local clubs has been very satisfactory and prolific of good to the members, and they will continue to increase in numbers and value, the time seems to have come when this influence should be, and with wise management can be, extended. Already closely connected through fraternal sympathy, the formation of a general society would make the interest and mutual aid more definite. Club drawings could be exchanged; club competitions could be broadened, until each club in the league would work upon the same subject, and the honor of being most successful among the draftsmen of the country rather than of a city, stimulate the members to greater action, and the production of more carefully studied, and generally creditable work. The relations between architects and draftsmen are too close for such a combination ever to have any bearing upon the business aspect of a draftsman's life except as it may give him greater proficiency. Rightly managed, there are possibilities to a more extended usefulness, which, though limited, can give draftsmen opportunities that the local club cannot. It is also true that the personnel of the local club must still be preserved, and never through assimilation lose in strength or purpose.

THE joint committee upon a uniform system of contracts, composed of three members each of the American Institute of Architects, the Western Association of Architects, and the National Association of Builders, met at New York, June 6. Though this committee is still in session as we go to press, there is little doubt of the result. This system was formulated by a committee of the National Association of Builders, indorsed by it at the last convention, and generally discussed and indorsed by the different builders' exchanges since. Its provisions are in the main equitable, and it seems to us that the only point upon which a wide diversity of opinion may exist will be in a clause protesting against the architect being the sole arbitrator and interpreter of the contract. This will be insisted upon by the architects, and will have to stand as it has in the past. It can scarcely be modified, as the architect stands between the contractor and the owner, and while acting as the latter's agent is still bound to see that the contractor receives full justice. The only recourse from this is a permanent board of arbitration, to which all differences between architect and contractor can be referred and adjusted, and we doubt if the majority of architects would consent to even this modification. The members of the committees are selected from among the best men in their respective associations, and the result of their deliberations will be certain to meet with general approval.

AT last the competition for a court house and city hall at Minneapolis, Minnesota, has probably been definitely decided. Almost a year ago we published the competition circular issued by the board of nine commissioners, and the progress of the competition has been reported from time to time since. After some time spent in trying to arrive at a decision, the commissioners called to their aid Architect W. W. Boyington, of Chicago, who selected five designs. This was not final, however, and since then, as the newspaper report naively remarks, "the contest between the friends of these five plans has been quite a bitter one." At a meeting of the board of commissioners, June 5, a final vote was taken, one of the two designs by Architects Long & Kees, of Minneapolis, being awarded the first prize by a majority of the commission, the chairman, General Washburn, voting in the negative, stating his wish "to go on record as voting against a design that had been ignored by the expert employed by the commission." The second prize was given to W. H. Dennis & Co., of Minneapolis; third to M. E. Bell, of Chicago; fourth to Alexander Murrie, of Minneapolis; and fifth to Orff Brothers, of Minneapolis. It was voted to make Long & Kees the architects of the building, provided satisfactory arrangements can be made. According to the terms of the competition these five designs now belong to the county, and it is entirely optional with the commission who shall carry out the work or which design shall be used.

THE business side of the profession has never, perhaps, in the architectural history of this country, presented itself quite so strongly as in this competition. It was a "business" competition from the start. The commissioners, in a business way, advertised that they would buy plans. Twenty-three architects, and at least half of them of more than average professional ability, presented plans for sale, and the public were called in to see the artistically tendered perspectives and pronounce upon their respective merits. Like business men, as more than one of the competitors admitted to us, they entered the competition relying more upon the influence they might bring to bear upon the commissioners than upon their ability as architects. Of course they would

present as fine a quality of goods as possible, but they understood from the start that it was their "business" ability which should carry them through to victory if they were successful; and though the competition closed in February, the decision has just been made. The Minneapolis papers have reported progress from time to time. Now A was said to have a majority of votes, but the next day B would seem to have captured one or two more, and so the matter stood until a Napoleon of architectural business tactics might appear and secure a working majority. Now that this is decided it remains for both the victor and his competitors to figure the expense and ascertain if entering such a competition pays. There is no other honor in winning the competition than the purely business one. Art has not been considered, except when an architect was called in to select the five best designs, and his decision being from an architectural standpoint, and not a business one, was thrown aside. Any one of half a dozen of the designs would have made a suitable building, as far as the unprofessional commissioners could judge, and therefore the victor cannot claim that the excellence of his design had much, if anything, to do with the award. If architects will look into the history of this competition it may keep them out of many such, and save both their professional dignity and their cash.

IT is becoming more evident, as time passes, that the general efficiency of architectural associations can be increased by the establishment in each large city of an architectural headquarters or club rooms. This is especially true from a social standpoint. The draftsmen have recognized the fact, and some very attractive quarters have been fitted up by different clubs, and the result has been not only an increase in membership, but a larger attendance at regular meetings.

Photography in Architecture.*

PART VIII.—BY FRED D. FOSS.

SINCE writing the last article various other experiments have been made with hydrochinone as a developing agent, which not only substantiates the good opinion already formed of that chemical by the numerous experimenters, but places it in the front rank of developing agents, and when more workers in the art turn their attention to it and learn its excellent qualities it will undoubtedly come into general use. A more extended use of hydrochinone will create a demand that will be met by the manufacturing chemists, and the price, which is now considered high, will be greatly reduced. The cost of hydrochinone is very small compared to other developers, when you take into consideration the number of times it can be used without losing its good qualities. Some of this developer made three months ago is in use today, with as good effect as when freshly mixed. In explaining the peculiar power of hydrochinone one cannot do better than to quote from a paper presented before the photographers' convention by C. E. Van Sothen, last year. "The various possible, and alas! oftentimes also nearly impossible, forms of developers which, from the first practical application of the gelatine dry-plate process up to the present day, have from time to time been brought forward would fill many a page of photographic literature, and upon the experimental photographer has devolved the task of learning from careful and practical tests the characteristic qualities of each individual formula; of determining the amount of advantage gained from applying the one or the other, simple or modified, to certain special purposes; and of deducing therefrom the relative value as to general or special usefulness of the many different mixtures and components. The work, though highly interesting, has been arduous and difficult. A golden kernel of wheat has been brought to light out of an abundance of worthless chaff, and too much praise cannot be bestowed upon such men as Captain Abney, Dr. Eder, Carey Lee and many others for the invaluable services which, through their untiring energy in the field of photo-chemical research, they have rendered to our profession. Yet, with all due appreciation of these scientific investigations, and many valuable discoveries to which they have led, it appears to me that no line of research in photographic chemistry has brought less tangible benefit to the practical photographer than the dry-

plate developers; ferrous oxalate and alkaline pyro, in more or less modified form, being today, as they were five years ago, the only reducing agents in practical use with more than nine-five per cent of all the photographers on the globe.

"Here, then, seems to be a chance for the introduction of something comparatively new, and on that ground I hope to be pardoned for bringing to the notice of this convention a developing agent which, though photographic journals have once or twice mentioned it, and its name is undoubtedly familiar to many, is actually so very little known that a few words in its favor may perhaps tend to bring it into more general use, and eventually gain for it the appreciation which it so highly deserves. Hydrochinone (C_6H_4O), a derivative of cinchonin, is an hydrocarbon of a composition similar to that of pyrogalllic acid ($C_6H_3O_3$) and its proportions also bear a strong resemblance to those of this, our most important oxidizer. Its capacity as an oxygen absorber is even greater than that of pyro, the comparative energy of my normal developers being as nine to seven in favor of hydrochinone. But this affinity for oxygen is not as greedy as that of pyro, and its action is therefore less violent and under better control, and in this property of applying its great reducing force slowly, gradually, without unnecessary waste, and without exhausting its strength from the outset, I find the chief advantage of hydrochinone over pyro. Its developing action, as said before, is necessarily slower, but on account of the great constancy of its reducing power, marvelously effective; every molecule of the exposed film, no matter how feeble the impact of light, having to submit in due time to its persistent and apparently untiring energy. Its keeping qualities too, whether in stock solution or mixed developer, are excellent. I have a case on record when with six ounces of developer, containing thirty six grains of hydrochinone, I developed 5 by 8 plates, transparencies and line-work negatives, without any addition whatever, by merely increasing the time in the camera, after which the mixture was bottled and served as an excellent "starter" for subsequent exposures. A rubber-stoppered beer bottle full of the stock solution, put up on January 5, 1887, and kept in the dark room at a temperature varying from fifty to ninety degrees Fahrenheit, is today (September 9, 1887) almost colorless, and as good as when freshly mixed. Hydrochinone is but sparingly soluble in cold water, fifteen grains per ounce being about a saturated solution, but this is amply sufficient for practical use. Another excellent quality of hydrochinone is the beautiful tone of its deposit; a fine velvety engraving black, and a magnificent clearness of shadows, which for transparencies, lantern slides and line-work negatives especially, is unequaled by any other developer. Alum and restrainer are unnecessary. The addition of bromide changes the tone to a rich brown, but it should be made very cautiously, as the addition of a few drops of a ten per cent solution will exercise quite a perceptible retarding action and render the mixture rather unfit for future use. A few drops of a one per cent solution of hyposulphite of soda will to some extent restore the energy of the developer, but such doctoring is, at the best, somewhat hazardous. My formula, which, after much experimenting, I have found, after more than four years' practice, to be thoroughly reliable and in every respect satisfactory, is as follows:

SOLUTION No. 1.*

Soda carbonate..... 50 grains.
Water 1 ounce.

SOLUTION No. 2.*

Hydrochinone..... 12 grains.
Soda sulphite (crystals) 60 "
Water..... 1 ounce.

For use mix:

No. 1..... 1 ounce.
No. 2..... 2 "
Water..... 1 "

(* This is the same formula that was recommended in the last article.—ED.)

"The water is added either warm or iced, according to the season, in order to give the developer the proper temperature. The image will make its appearance rather slowly—on a properly exposed plate in about two or three minutes—but once started development will proceed rapidly and progressively to the attainment of the finest detail and any required density. The film will never become stained, under the most protracted development, and, owing to the strong tanning action of the hydrochinone, frilling, even in warm solution, is exceedingly rare. The same conditions that govern pyro development, with regard to intensity and detail, hold good in the case of this reducing agent, an increase of hydrochinone giving strength and dilution producing detail. The amount of alkali in the formula given above being already large, I do not favor an increase of it with a view of forcing up detail, my mode being to obtain the proper intensity first, and then, if required, finishing up for fine detail in water made slightly alkaline with soda carbonate. The plate is, of course, transferred to this without washing."

(To be continued.)

* Continued from Vol. XI, No. 6, page 59.

Town Sewerage in Relation to Civil Architecture.*

BY E. KUICHLING.

THE powerful impulse which the remarkable development of science and industrial art, during the past few decades, has imparted to modern civilization, has had the effect of inducing an astonishingly rapid growth in the population of nearly every large city. Among the reasons that may be assigned for this growth, the principal ones are doubtless the general increase of wealth, resulting from more skillful management of business enterprises and the payment of higher wages to employes, the consequent desire for the comforts, recreations, and luxuries obtainable in large communities, and the attraction which the possibility of securing profitable employment exerts upon the population of agricultural districts. A study of the census reports of our own and other lands shows that the concentration of population in large cities still continues, and, in fact, that the rate of increase is steadily growing. The introduction of so many new inhabitants, however, occasion periodical insufficiency of accommodation in these places, and thus requires commensurate improvement in both public and private work, not only in order that proper care may be taken of the new arrivals, but, also, that no serious danger to health shall result from the aggregation of large numbers of people upon a limited area of territory. Experience has proven that, sooner or later, the site of such aggregations will become pestilential, unless early provision is made for the safe removal or destruction of the putrescible organic wastes produced by the occupants, and as the study of the precise relation of these wastes to the diseases prevalent in dense communities has latterly become very extensive, the expansion of our knowledge has led to the development of a special department of applied science, called sanitary engineering, which deals with the promotion of the health, comfort and longevity of mankind. Now, since one of the provinces of architecture is the accomplishment of the same purpose, there is accordingly a common ground upon which the architect and sanitary engineer can meet; and upon the particular corner of this ground which relates to the sewerage of cities, it has been suggested that we stand together for a short time today.

Sanitary science in general is not a new thing in the world's history. Much pertaining thereto was well understood in ancient times, and the remains of elaborate drainage works have been brought to light by recent excavations of the sites of some of the former centers of civilization. Perhaps the earliest written formulation of the elementary principles of this science is the code of sanitary laws laid down by Moses in the Old Testament. Thus, in Leviticus, chap. xiv, verse 37, where a plague-infected dwelling is described, we cannot fail to recognize in the expressions: "The walls of the house with hollow streaks, greenish or reddish, which in sight are lower than the wall," a description of a wet subsoil polluted with filth. The ancient remedy prescribed for such a condition was the entire removal of the infected portion, its reconstruction with clean, new materials, and the thorough cleansing of the remainder in all particulars. At the present time, little more than this would be done by our city health officers in a similar case, and the additional work would consist in the examination of the water used by the inmates, and the removal of all accumulations of decaying organic matter from the premises; special stress would also be laid upon the necessity of efficient under drainage and sewerage, in order to prevent dampness and any further pollution of the soil.

Other principles of sanitation were likewise enunciated by Moses, which are still regarded as standards, and form the basis of certain recent systems for rendering harmless various offensive wastes. Moule's earth-closet, and Petrie's application of peat, may be cited as instances of this kind.

The rules, however, which were of easy observance by a nomadic people, who could quickly leave a tainted locality, required considerable amendment after the migratory habits were abandoned in favor of permanent abodes in a single spot. For social and defensive reasons, large numbers of persons gathered together more or less compactly in communities or cities, and it was soon found that almost as much was to be feared from the diseases which developed in dense populations as from the attacks of external foes. Great care, accordingly, became necessary in the choice of locations for new towns, both with regard to the preservation of the public health, and to successful defense in times of war. These important principles were keenly appreciated by the ancient Romans, whose conquest of the world was distinguished by the foundation of a vast number of cities, connected together by great roads, and provided with extensive sanitary works for the welfare of the inhabitants. In fact, the Roman civilization in Europe was characterized by the concentration of the population in cities, and the almost entire absence of country dwellings. We are informed by Latin authors that much attention was paid to the selection of sites for their towns, particularly with the view of securing freedom from noxious exhalations, and obtaining efficient drainage. The extensive sacrifice of domestic animals, kept for a long time in a locality, previous to deciding upon the foundation of a city, possessed, in reality, a scientific significance; for when the livers and certain other organs were found in a healthy condition, it was regarded as evidence that the soil of that locality was safe for the occupation of human beings, and that its waters were fit for their consumption. Examinations of the subsoil were also made to ascertain whether it was capable of sustaining the weight of the contemplated structure, and whether it contained an undue amount of ground water. If all of these conditions were found favorable, work on the new site was generally commenced by systematically draining it, as well as the adjacent lands; and as soon as a sufficient population was attained to warrant the expense, other improvements specially designed for the health and comfort of the inhabitants, were carried out. The sanitary work done by the ancient Romans is thus seen to give evidence of much commendable wisdom, and of remarkable municipal enterprise.

With the fall of the Roman Empire, however, the development of practical sanitary science ceased for many centuries, and nearly all of the

important public works that had been constructed for the maintenance of health in populous cities, were allowed to decay, and even to become utterly forgotten. As a consequence of this neglect, the condition of densely inhabited towns became deplorable, and relief was sought by the formation of smaller communities, in the agricultural districts. A number of large cities, however, which were distinguished by an unusually favorable sanitary and commercial location, continued their existence, but their growth was very slow, and serious epidemics were of frequent occurrence. In spite of such repeated warnings, few efforts for improvement appear to have been attempted, and these only when an exceedingly large mortality threatened the ultimate condition of the physical sciences, which are the handmaids of hygiene. The measures adopted at such times were rarely of permanent value, and it was not until civilization had sufficiently advanced to lead again to the formation of large towns, that considerations of the general health and comfort of the population gradually compelled earnest attention to be given to the subject of the systematic removal of the dangerous organic wastes. Especially slow appears to have been the progress of the art of the sanitary drainage of dwellings and cities; and, in fact, so recent is the formulation of the principles of scientific sewerage, that many of the pioneers of the art are still counted among the living.

The relation between architecture and the sewerage of cities will doubtless appear very remote at the first glance, but, upon reflection, a strong mutual dependence of these arts can be easily discovered. The development of a large city involves an accumulation of wealth by many inhabitants, and the creation of desire for personal comfort and luxury. To satisfy this desire, the architect's skill is first called into requisition, and hence large towns become the special field of important architectural operations. Particularly is such the case in our own country, where the physical and intellectual activity of the people is much more concentrated in cities than in the Old World, and in consequence of this fact the best specimens of American architecture are generally found in populous towns, and their immediate vicinity. The increased value of land in large cities, as well as the effort to provide better for great multitudes upon relatively small areas of ground, has also resulted in the development of an entirely new type of buildings, which is characterized by an unusual height of walls and a large number of stories, and which has been adapted to a variety of purposes. Structures of this kind are necessarily more or less monumental in character, and require the utmost stability of their foundations, in addition to pleasing appearance and convenient arrangement. They must, moreover, be made perfectly healthy in all their parts, otherwise the large outlay involved in their erection will not meet with adequate returns. Now, both of these essential features are dependent in high degree upon the local sewerage system, and hence it allows that architectural progress is always impeded where facilities for drainage and the removal of organic wastes are absent.

This statement likewise holds true in the case of smaller and less pretentious buildings than the class just referred to, since here the cost of securing proper sanitary conditions by individual enterprise is generally so large as to become prohibitory. Even though a few thoughtful persons should be able to render their own habitations reasonably salubrious, yet they are still exposed to the dangers that may emanate from contiguous premises, where sanitary precautions are neglected. In compact communities, therefore, it is important that every household shall be provided with ample facilities for getting rid of all objectionable waste matter, since the retention of such wastes at any point is actually a menace to the health of the entire neighborhood; and should infectious disease break out at one of these points, its intensity is sure to be greatly aggravated. The provisions of such facilities must accordingly become the subject of municipal action, and in their design and execution it is obvious that architects have a material interest.

In malarious urban districts, or in those which are undrained, the character of the population is always somewhat unstable. The owners of the land have consequently no incentive to erect expensive buildings, and hence only light and temporary structures are built, which afford little opportunity for the display of architectural skill. On the other hand, we notice that in healthy localities costly edifices are rapidly multiplying, also that as soon as proper drainage works have been constructed, sites which were previously avoided find ready sale. The cause of this general preference for dry locations is found in the fact that dampness of the soil under human habitations has gradually come to be recognized as the chief factor in the production of pulmonary diseases, rheumatism, and various fevers. Furthermore, that after the level of the subsoil water in a populous district has been permanently lowered by properly built sewers, both the amount of sickness and the death rate are greatly reduced, and, finally, that the position of the subsoil water level usually limits the depth to which excavations for basements and foundations can be carried without undue expense. The prevention of large fluctuations in this water level by suitable drainage work is, moreover, of much importance to the architect, inasmuch as the stability of a foundation, that has been designed for a compact and dry soil, may become seriously affected by the saturation of the earth directly below heavily loaded walls.

It may be remarked here that, in the case of large cities, the drainage of the surface and the subsoil, as well as the removal of organic wastes by water-carriage, is commonly effected by a single subterranean conduit; but when circumstances demand that the conduit containing such objectionable wastes shall be absolutely impervious, a separate pipe, laid under or alongside of the former, and simultaneously with it, is sometimes provided for the interception of the subsoil water. Drainage and sewerage are thus performed by a single operation, and even where sewers have been constructed as water-tight as possible, with a direct view of excluding subsoil water, a marked reduction in the level of the latter always follows from the simple act of cutting a trench on a true grade to some outfall, and the provision of a relatively smooth and continuous surface along which this water may flow in a thin sheet. The principal function of a sewer, however, is the quick removal of putrescible refuse matter from human habitations, and the delivery of such matter to some point where it will not become offensive or dangerous. Various systems for the

* Paper read before the Western New York State Association of Architects February 7, 1888.

accomplishment of this end have been devised, but, in general, it may be said that the system which depends upon the agency of water to carry away the waste and keep the conduits free from accumulations is the simplest and best adapted to the needs and complications of modern municipal organizations, especially in countries where the republican form of government exists. As the limit set for this paper prevents me entering further upon a consideration of the merits and disadvantages of the several systems, it will accordingly be assumed that the statement just made admits of satisfactory demonstration, and that a city well provided with an efficient network of sewers affords the most favorable conditions for the development of modern architecture.

The important features of any system of sewerage, viewed from an architect's standpoint, are the depth to which the sewers are laid below the surface and the kind and quantity of waste matter which they have been designed to receive. Both of these factors contribute largely to the determination of the character of the buildings, and the amount of money to be expended in their construction. It frequently happens that the growth of an entire district, which is amply drained and particularly adapted for residence purposes, is utterly prevented by the existence of some factory, whose offensive wastes are permitted to pollute the sewers of a large area. Examples of this kind are numerous, and among them the case of petroleum refineries, slaughter houses, gas works, soap and rendering factories, and similar establishments, may be cited. Conversely, where the sewerage is inadequate, or the ultimate outfall for the sewerage unsuited for the reception of manufacturing wastes, industrial works cannot be located, and the community or district must suffer the financial loss which the absence of large industries always entails. It is evident, therefore, that the selection of a system of sewerage is a matter of great concern to every community, and that in the final decision architects, as well as sanitarians, should have a controlling voice, since their special training in both artistic and practical directions, renders them admirably qualified to criticize the general outlines of such a scheme.

In reaching their conclusions, however, it is necessary for the architects to view the subject of the sewerage of cities broadly, and to remember that the sanitary engineer must occasionally sacrifice the interests of some small locality in order to adapt its design to the economical interests of the large remainder; also that in populous towns the maintenance of any system of removing offensive organic wastes is always invested with many perplexities. No method of accomplishing this purpose automatically, or without intelligent human supervision, has yet been devised; and where a reasonable amount of care on the part of the authorities, and the citizens generally, is not given to their sewers, trouble from the latter will inevitably arise. Constant attention is therefore required for the successful operation of the system, and architects can do much toward arousing the public from their apathy respecting municipal sewerage, and hence also toward the promotion of the general prosperity of the community. The fundamental principle of such work is to remove the organic wastes rapidly, and beyond the limit of danger, before any deleterious putrefactive changes take place, and the question of the proper disposal of these wastes is a necessary sequel, but which cannot now be taken up, except in the most general manner. One of the commonest errors that corporations commit, in this respect, is the defilement of small natural water courses with sewerage, and the ultimate covering of such channels after they have become intolerable. Valley lines may always be improved by a proper regulation of the natural channel and marginal sewers can be constructed to avoid polluting the stream. Only when the volume of water is very large in comparison with that of the sewerage, can the question of a direct discharge into the stream be entertained, and even then, much will depend upon the velocity of the current and the quality of the sewerage. No general rule for the government of this subject has yet been agreed upon by sanitarians, and the matter is earnestly debated in every land, the tendency being rather in favor of clarifying sewerage before emptying it into rivers of moderate size.

The ventilation of the public sewers is likewise a proper subject for the consideration of architects, especially in our northern cities. During long periods of cold weather and snow fall, most of the openings leading to the sewers from the street surface are completely closed by snow or ice, and the atmosphere in the sewers becomes considerably compressed. Relief is then sought through the house drains, and if these happen to be defective, sickness is apt to break out. Under such circumstances, the slight resistance offered by the water seal of ordinary traps is easily overcome, and unless the sewer air finds free vent through capacious soil pipes, it will escape into the apartments.

In the foregoing, an attempt has been made to point out a few of the relations that the sewerage system of a large city bears to the architect's work, and to show that the members of this profession can easily exert a vast influence in the formation of a proper public opinion with respect to the necessity of sanitary drainage. By the persistent efforts of those who realize the evils which result from the wholesale pollution of water, soil and air in crowded cities, a strong sentiment in favor of health and cleanliness may gradually be developed, and the people made to understand that the annual expense of maintaining a rational system of sewerage is much less than the aggregate of individual expenditures for the maintenance and cleansing of receptacles for the storage of organic wastes. The subject thus briefly set forth largely affects the life and comfort of mankind, and is sufficiently interesting to invite more exhaustive investigation. Architects may, accordingly, regard many of the technical problems connected with the sewerage of cities, as forming a branch of their own profession, and by devoting more attention to these problems, they will not only find the study thereof extremely fascinating, but will also be better enabled to coöperate with engineers in improving the sanitary condition of populous towns.

ARCHITECT RALPH MERRIMAN, recently of the supervising architect's office at Washington, has opened an office in the Calumet building, Chicago. Mr. Merriman is a gentleman of ability, and should be heartily welcomed by Chicago architects.

Art Education in our Public Schools.*

BY HAROLD SMITH.

DRAWING in some form or other has been taught in the public schools for many years; but of work that is worthy of mention, either in its purpose or in its results, there has been very little done until within the past fifteen years.

The first movement was in 1820, in Boston, by a man named William Bentley Fowle. He was a member of the board of education, and took charge of one of the schools to prevent its being disbanded, the head master having been taken sick. Master Fowle remained a teacher through the rest of his life. During the time he was connected with the public schools in Boston, he introduced radical reforms; among others, the use of blackboards and instruction in drawing; the admission of girls to schools during the entire year. Previous to that time they were admitted only from April to October; and previous to 1790 they were not admitted at all. He advocated drawing for its value educationally; that is, as a help in gaining knowledge of other subjects.

He was allowed to remain in the public schools only two years, and then was thrown out by an ignorant board. Private citizens, however, established him in a school of his own, and the Boston schools were largely remodeled after his ideas.

The next movement that we hear of was in 1884, by a man named Rembrandt Peale, in Philadelphia. Mr. Peale had two ambitions: one was to paint a portrait of Washington which would be accepted by his countrymen; and the other was to establish a system of drawing which should be taught as universally as reading and writing. He finally prevailed upon the authorities in Philadelphia to allow him to give instructions in drawing in the high schools. After teaching there about two years, he proposed to give instruction in the graded schools, without compensation. This met with violent opposition, and called forth severe attacks upon Mr. Peale and his entire system. He secured an investigation. A committee was appointed, for whom artists, technical draftsmen, civil engineers, and others testified as to the merits of Mr. Peale's system and instruction. As a result, the committee were compelled to bring in a favorable report. But this did not overcome the opposition, and Mr. Peale, unable to carry his work forward, resigned, without attaining permanent success. He advocated drawing on account of its æsthetic value.

The next movement was in Baltimore, in 1884, when a Mr. Minifie, after considerable urging, was allowed to give instruction in the public schools. He taught for a year or two, but was thrown out by an ignorant board. He advocated drawing from the standpoint of its value to our industries, and made the study of design the most prominent feature of his instruction.

From 1850 to 1860 the subject has received some attention in the reports of superintendents of schools and of a few educators. In 1860 Massachusetts passed a law permitting drawing to be taught in the public schools, when school boards deemed it expedient. In 1870 Massachusetts passed a law requiring drawing to be taught in all cities of 10,000 or more inhabitants. From this time dates the real development of systematic instruction in drawing in our public schools.

The idea which prompted that legislation was the same that founded the South Kensington Museum, namely, that we must protect our manufactured articles by making them more artistic. England discovered that her articles were inferior in their artistic beauty in 1851, at the first World's Exposition, and instead of building a tariff wall around her products, she formed a new department of her government: "The Science and Art Department," and founded the South Kensington Museum. Our manufacturers were not slow to learn the lesson, and it was from this that drawing was made an essential part of the public school work in Massachusetts.

From 1871 to the present time, drawing in the public schools has constantly increased the wealth of the country, so that today it is a part of the regular instruction in nearly all of our cities, larger towns, normal schools, and even in some country district schools.

From 1871 to 1881 teachers who were obliged to teach drawing, or taught it voluntarily, discovered many advantages accruing from this branch other than the industrial advantages upon which it was introduced. During the same period the whole subject of education received much more thought and careful study than ever before. The true aim and object of education was considered. Stated broadly, education was said to be the direction of the development of the human being, to discover all the faculties, capacities and abilities of the individual, and to develop them. That is a very different idea from what had largely obtained before, and which obtains to some extent now, namely, that education is to enable the individual to earn a living. Viewing education from the broader and higher standpoint, one advocates drawing in the public schools because it develops the æsthetic sense, another because of its practical value to the mechanic and the laborer, another because it develops the scientific qualities of mind, and still another because it is a good or convenient thing to be able to draw, or because it is an accomplishment.

Recognizing all these advantages, it is no longer necessary to advocate the teaching of drawing in our public schools. We are now able to turn our attention to the question of *how* it shall be taught, so that it shall be thoroughly educational. The public schools are to develop children mentally, morally and physically. Whatever instruction those schools give must aid such development.

This brings us to a study of the child. Drawing is a knowledge of form. How does the child obtain a knowledge of form? This brings us to the most interesting phase of art instruction, and, possibly, to the most difficult. The art of teaching children is one that absorbs the abilities of the ablest. If it is interesting to study the growth of the animal kingdom or the vegetable kingdom, fancy what it is to study the growth of the human mind in order to be able to wisely direct its development. We cannot change the laws of growth of mind any more than we can change

* Paper read before the Art Institute, Chicago, February, 1887.

the laws of growth of the vegetable kingdom, but we can, to some extent, control the environments of the child and direct that growth. Our study of the child, how the child naturally gets a knowledge of form, shows to us that it obtains this knowledge through the senses of sight and touch. Space will not permit the presentation of the discoveries in regard to what we learn from these two senses; it must suffice to merely state what is accepted by all who studied or investigated the subject. We can never know solidity and distance by sight alone, but only through sight and touch, and through movement and sight. The quickest and surest way of getting accurate and definite knowledge of form is by seeing, handling and making the form. All form is reducible to geometric forms; therefore, the form in its simplest condition may be said to be geometrical. Hence we begin by acquainting the child with geometrical forms through seeing, handling and making them. In considering this subject one should bear in mind the condition of the public schools. Imagine, if you please, a room of children from four to eight years of age (that being the lowest primary grade), and from seventy to seventy-five of them; a teacher who never had any instruction in drawing and thinks she can never learn to draw, that she has no talent for drawing, and that if she had providence would, in its own mysterious ways, have manifested that capacity to her, and that to try and get it in any other way would be flying in the face of providence. Extend this to include six to eight millions of children, and teachers in proportion; remember that one hour to one hour and a half per week is all that can be given to the subject, and you have some idea of what may reasonably be expected from the public schools. But, on the other hand, you should bear in mind that there are many teachers who have received a long and thorough training in the art, and who are engaged in the work of instructing the teachers and the pupils, and are building up a course of instruction which is rightly and properly termed "Art Education." There are also many of the regular teachers, who, having received no training in drawing, are applying themselves to the study, and already accomplishing excellent results. We are just beginning to realize the truth of what was said several hundred years ago, that every child who can learn to write can learn to draw. To draw well, to be an artist, is a different thing. We also see how that drawing contributes to the development of the human being mentally, morally and physically, and that it is of practical value to every person, whatever their occupation. Thus, a fourth "R" "drawing" has been added to the essentials of a public school education.

I will now briefly present the work as it is actually being carried on in the public schools of some of the cities and towns in this country. I have indicated the reasons why this method is pursued, and will begin with the work of the lowest primary, where the children range from four to eight years of age. The child is first made acquainted with the sphere, being the simplest form we know of, and an object which is already familiar to the child. We lead the child to discover certain things about it, and to state them in its own language; and if possible, each child is provided with a sphere—that depends upon how enlightened the Board of Education controls the dollars, and whether they see any sense in this kind of teaching, but the idea is that every child should have a form in his own hand; should talk about it in order that he may know about it most quickly and clearly. Clay is then given to the child, and they make the form themselves. At the same time they are asked to think of common objects similar in form. At the next exercise they are asked to make some common object like a sphere; thus the child's individuality is left entirely free, and he makes whatever he has in mind. Here the making, as later the drawing, is an expression of thought. Such exercises invariably develop the creative faculty in children. For the sake of contrast the next form taken is the cube. The child handles it, makes it in clay, and makes objects based upon cubes. Next the cylinder, which combines the characteristics of sphere and cube, namely, a flat and a curved surface. It is surprising to see how cleverly and nicely the children make the forms in clay, and the ingenuity which they display. It is also noteworthy how early children have an appreciation of the beautiful. I was present in a primary room when the children molded a cylinder in clay. The teacher selected three of the forms, one very slim, one very short and thick, and one of good proportions. She named them "Jim," "John," and "Tom," respectively. Holding them before the little folks, she asked them which they thought was the most beautiful—which they liked the best. Almost unanimously they replied: "Tom!" Upon being asked why, the answers by individual pupils were not so ready, but the teacher finally elicited from them that "Jim was too tall and slim," and that "John was too short and fat." Thus in these simplest forms was called forth that feeling for the beautiful that is a religion in itself.

They also have exercises in which they take a little piece of wire or thread and cut their clay forms, thus making other forms. In this way they proceed through a number of the geometrical forms—square prism, right angle triangular prism, cone, pyramid, ellipsoid, ovoid, etc. The next step is deriving from the solids their surfaces. This is done by calling attention to one face of the solid and leaving the children to describe it and talk about it, as, for instance, the face of a cube as a square, and the cube has six square faces, that a cylinder has two plain faces and one curved surface; that the square prism has four oblong faces and two square faces. These shapes they also derive from their clay solids by cutting a thin strip off of them with a piece of thread or wire.

The next step is to show how surfaces in meeting form an edge, and that edge may be represented by a line. Also, that in cylindrical objects where there is no edge which forms a line—no union of surface—there is a disappearance, and that that disappearance may also be represented by a line. In connection with and during the work referred to, instruction in position, pencil holding, free arm movement, etc., is given in order that the pupil may acquire good habits in execution. The children are also furnished with sticks, and arrange them first under the direction of the teacher, and think of them as edges, and then represent them by drawn lines. They are taught definite distances, such as inch, two inches, three inches, etc., and are required to draw lines at given lengths without measuring or testing, getting their ideas from objects. They are also

allowed to arrange the sticks according to their own fancy and then draw what they have made. Being supplied with the little surfaces, that is squares, oblongs, ellipses, triangles, etc., they are taught to arrange these in simple designs, being taught symmetry, proportion and arrangement, and then draw what they have made. Thus throughout the drawing and the making is the expression of the thought of the child. New forms are constantly being introduced, and the child's acquaintance constantly enlarged.

In the intermediate or lower grades, the study of form is divided into three divisions, for three distinct purposes, each interlacing and running into the other. The first is the study of the facts of form. These facts are represented in a drawing from which the object may be made. These are commonly known as "working drawings," such as are used by all mechanics, and are the bases of all industries. It is deemed important that every child should have some knowledge of this branch, and it is also a most natural step toward drawing the *appearance* of form, which is our next division. In the working drawing three dimensions are expressed, but in two or more separate and distinct drawings connect with one another by conventional lines, known as "working lines," to show that each drawing is a different view of the same object. In drawing the appearance of an object the three dimensions are expressed in one drawing, but, at least one dimension is expressed as it appears, and not as it really is. This division is called *representation*, or the drawing of form as it appears to the eye. Everyone should have some ability in this direction, as no one can completely express their thoughts by language alone.

The next division is entitled *decoration*, or the study of form, for the purpose of ornament. Here natural forms are studied, from which the *motif* is obtained to form the ornament.

These three lines of study begin in the grammar school and continue side by side through the grammar and high school, each being essential in the education of every child. The aim is not to make artists nor architects, mechanics nor designers, but that every person should have some knowledge of the appearance of form and some ability to represent it; some know of the drawing which workmen use, so that they may need plans and elevations, and some ability in expressing their own ideas in regard to machinery, furniture, houses, etc.; and also some knowledge of what constitutes a good design in any article; and some ability in expressing their own idea of design.

The high school work, in brief, is as follows: In construction, pupils make complete working drawings of tools, pieces of machinery, etc., directly from the object; plans and elevations of houses, details of carpentry, etc., and, beginning with flat washes, work their drawings in colors. In representation, as soon as they can draw a group of small objects in outline accurately and readily, they take up the study of light and shade, and, with crayon and charcoal, drawing from casts and objects, thence into color; of painting of groups from still life; study of backgrounds, etc. In decoration, beginning with the elements of color, copying some bits of historic decoration, original designs in color, painting artificial flowers, conventionalizing them and using them for original designs. Thus, at the end, we see how each division interlaces and runs into the other.

The study of the history of art is also taken up and pursued by text books, charts and drawings. Pupils are made acquainted with the characteristics of Egyptian art in sculpture and in decoration, and also of the different periods of art down to modern times. In connection with the study of light and shade, and also the study of historic ornament, clay molding is also used.

Here, as in the primary grades, the knowledge of form is gained through the sense of sight and touch. If you wish the mind to express roundness, as in a bunch of grapes or apples, you want that roundness expressed completely through the medium of light and shade. Let the pupil first model the bunch of grapes in clay, so that the mind may more thoroughly grasp the idea of roundness, and the pupil will much more readily express roundness in a drawing. The laws of growth of mind are the same in an adult as in a child; the *rate* of growth only varies.

I need hardly speak of the moral effect of art education. Any line of education that brings a person to a closer study of the beautiful in nature, or in ornament, or in architecture is a religion in itself. If art owes much to religion as furnishing one of the greatest motives that the human mind has ever aimed to express, art can, to a large degree, pay its debt to religion by furnishing a basis for moral action and duty that will inspire to as great deeds as have ever yet been performed by man!

A Phase of Ruskin's Character.

IN an article in the January *Century*, W. J. Stillman gives the following, to show one phase of the great critic's character. "Any present judgment of him as a whole is difficult if not impossible, because there are in him several different individuals, and the perspective in which we now see them makes of his position as an art teacher, the dominant element of his personality; whereas, in my persuasion, his art teaching is in his own nature and work subordinate to his moral and humanitarian ideals. He always saw art through a religious medium, and this made him from the beginning, strain his system of teaching and criticism to meet the demand of direct truth to nature, the roots of his enthusiasm and reverence being not in art but in nature, and in her beneficial influence on humanity. A little incident of our Alpine summer will illustrate this view of his character better than all my appreciations. During our stay at Geneva he had some mountain drawing to do at the Perte du Rhône, and asked me to drive down with him. Not far from the point of view which he had selected was a group of wretched dwellings, misnamed cottages, but which in America we call shanties—not the picturesque wall and thatch structures which the word cottage calls up in England, but built of boards, shabby without being picturesque, and to my American notions only capable of association with poverty and discomfort. Ruskin asked me to draw them while he was drawing the mountains. The subject was anything but attractive or pictorial, and though it should have been enough for me that he wished me to draw it carefully, I only obeyed my own feeling

and made a careless, ten-minutes drawing—all the thing was worth to me. When Ruskin drove up to take me in, on the way back to Geneva, and saw what I had done, he was—and I must say, with good reason, offended at the indifferent way in which I had complied with his request, and after a few reproachful words, threw himself back in the carriage in a sullen temper. I replied that the subject did not interest me, and that the principal feeling I had in looking at it was that it must be a wretched home for human beings and promised more fevers than anything else, and that, in short, I did not think it worth drawing. Nothing more was said by either of us until we had driven half-way back to Geneva, when he broke out with, 'You are right, Stillman, about those cottages; your way of looking at them was nobler than mine, and now, for the first time in my life, I understand how anybody can live in America.' It has always seemed to me that this was a true epitome of the man's nature—first, the æsthetic, outside view of the matter; then, the humanitarian, overpowering it; the womanish pettishness, and the generous admission of his error when seen; and after this confession, his greater cordiality to me—for he always valued more anyone who brought him a new idea, though he often broke friendship with those who differed from him too strongly." Mr. Stillman's article on Ruskin as a whole is most interesting. It is accompanied by a frontispiece portrait.

The Brochs of Celtic Scotland.

THE usual fortnightly meeting of the Edinburgh Architectural Association was held May 3—the president, Mr. Hippolyte J. Blanc, in the chair. After the usual preliminary business, Mr. Gilbert Goudie read a paper on the Brochs, or Round Towers, of Celtic Scotland. Proceeding to describe those unique and remarkable structures of remote antiquity, which had not previously engaged the attention of any architectural body, and are not to be confounded with the ecclesiastical round towers of Ireland or of Scotland, Mr. Goudie submitted as a typical example the broch in the Island of Mousa, Shetland. This, the best preserved of existing specimens, is still standing to a height of upward of 40 feet. It is a circular tower, consisting at first of a solid wall (unless where pierced by three chambers formed in its thickness). At the height of 8 feet this massive wall, hitherto 15 feet thick, assumes the form of two concentric walls, with an intervening space of about 3 feet, which is converted into a succession of horizontal galleries, six in number, some of them about 5 feet high and some lower, immediately above each other, and intersected by a staircase leading to the top. The central area is an open circular court of about 30 feet diameter. The only external aperture is the entrance, about 5 by 3 feet, passing through the main wall to the inner court, from which the stair to the galleries ascends. The stair and galleries are lighted by four sets of small rectangular window openings above each other, looking into the court. The walls are of very solid masonry, the stones of good size without tool-marks, and are dry-built without lime or clay mortar. There are also some rude buildings attached to the main wall on the inside, irregular in form and undeterminable in object. These architectural features described apply to broch structures everywhere, with variations in size and in constructional details in individual instances, foundations of large rambling buildings on the outside being very common. The most laborious investigators of brochs have been Dr. Joseph Anderson, the Rev. Dr. Joass, of Golspie, Sir Henry Dryden, and the late Mr. George Petrie, who have given measurements, and collected a mass of information regarding their structure and contents which now enables us to treat the subject with some degree of scientific accuracy. As regards the contents of the brochs, the lapse of time since their erection and occupation has led to the destruction of what was most perishable within them, but there have been found numerous stone querns or hand-mills, spindle whorls of stone, stone cups, lamps, whetstones, occasional articles of bronze, such as pins and tweezers, bone combs and pins, implements of deerhorn, etc., all indications of an iron-age occupancy. On one occasion, in Orkney, a slab bearing an incised cross, with an Ogham inscription, was discovered. Coming to the consideration of the origin of the brochs, the architectural features of their construction were described as being essentially native and Celtic, and so dissimilar to anything known in Scandinavia as to put out of court the contention of the late Dr. Fergusson, author of the "History of Architecture," that they were erected by the Scandinavians. The lecturer, therefore, had no hesitation in asserting the theory which assigned them to native builders, old Celts of Scotland and the Isles, in the pre-Scandinavian period terminating more than a thousand years ago. They are now found in Orkney, Shetland, Caithness, Sutherland and Ross-shire, on the mainland and in the Isles, but individual instances remain so far south as in Perthshire, Stirlingshire and in Berwickshire, indicating that they existed over the whole Celtic area in this country, though lapse of time and agricultural improvements have accomplished their almost total obliteration except in the remoter districts. It is thus in Scotland, and in Scotland alone, that these structures are to be found. The brochs appear to have been simply towers of defense, possessed of large capacity for accommodation, though by no means of a comfortable kind, and of almost unassailable strength in the then methods of warfare. The question of the date of their erection is beset with difficulty. No record of their erection or ordinary occupation is preserved. It is true there are instances of occupancy recorded in the northern sagas, namely, by Bjorn Brynjulfson, about the year 900, and by Erlend about A. D. 1155; but these were merely flying visits by adventurers with their lady loves, and the selection of Mousa on both occasions, more than two centuries apart, seems to warrant the suggestion that it was then, as now, the only broch in Scotland remaining in a state fit for even temporary habitation. It has been advanced that the absence of reference to brochs by Roman authors in treating of the conquest and partial occupancy of Caledonia, while such structures are known to have existed at one time in districts with which they were familiar—e.g., the valley of the Forth, where at least one example remains—is ground for assigning their erection to an exclusively

post-Roman period—i.e., subsequent, say, to the fifth century. It is also the fact that articles discovered in, or associated with, brochs are usually of a comparatively late iron-age type, are not indicative of the highest antiquity. But in the opinion of the lecturer great weight was not to be attached to negative evidence of this kind. Their existence might have been ignored by the Roman writers that are known; and with further systematic exploration evidence of earlier civilization may at any time be produced, the articles at present known being naturally relics of latter occupants. Some of the brochs were completely in ruin, and had become grass-grown mounds, where pagan interments, sometimes with cremation, were made in them. Their destruction must, in any view, have taken a prodigious time to accomplish, and he was not disposed to confine their erection and occupancy within any limitation of time that it was within the power of existing knowledge to determine. Mr. David M'Gibbon proposed a hearty vote of thanks to the lecturer, which was unanimously agreed to. Mr. Blanc then gave a short account of the work of the first section of the work class, and said they hoped to be able next year so to systematize the classes as to afford to the young men such advantages as should be useful to them if they had any desire to come forward for the examinations under the Royal Institute of British Architects. Mr. M'Gibbon said they had thirty members in the class, and out of that number twenty-two had sent in competitive plans and elevations for the prize subject—"A Scottish Mansion." The plans and elevations were most creditable, and would do credit to any set of men. The committee had unanimously awarded the first prize to Mr. John Begg, with Messrs. Victor Horsburgh and Robert Lorimer equal for the second place. The proceedings then terminated.

Illinois State Association of Architects.

THE regular monthly session of the Illinois State Association of Architects was held Saturday afternoon, June 2, at No. 66 Washington street, President Samuel Treat presiding. The following members were present: L. D. Cleaveland, S. A. Treat, W. W. Clay, L. G. Halberg, L. J. Schaub, O. J. Pierce, D. Adler, L. H. Sullivan, R. C. Berlin, George Beaumont, C. L. Stiles, C. J. Warren, A. Smith, N. S. Patton, J. L. Silsbee, Henry Raeder.

Upon calling the meeting to order, the chair called for the reading of the minutes of the preceding meeting, which were read by Secretary Berlin, and, on motion, approved as read.

The Chair: We are now ready to hear the reports of committees.

W. W. Clay: Mr. Chairman, the Executive Committee have no special report to make, except that we have been considering the fact of our not having now any permanent quarters and suggest the propriety of adjourning over until October 1, a lapse of three meetings, which is about the customary thing, and by that time we may have something further to offer. I would therefore move that when this meeting adjourns, it adjourns to October 1.

D. Adler: I would like to amend by making it September 1.

L. H. Sullivan: That would require a change in our by-laws.

Mr. Adler: I might as well state the reason why I suggest the amendment. I believe under an old resolution, in the early days of the Association THE INLAND ARCHITECT was made the official organ of the Association. The change to the first Saturday of the month was made to meet the wishes of the publishers of that paper, as the reports of the meetings, held at the close of the month, came too late to appear in the regular edition, and had to be put in the intermediate edition. I think it is better to have the meetings earlier in the month to make sure that the reports can appear in the regular number, as I think it is desirable to have the proceedings published as promptly after the meetings as possible.

The Chair: You had better give notice today so that it can be taken up again.

Secretary Berlin: The by-laws require twenty days' notice to be given.

Mr. Adler: What is the date fixed for our meetings?

Secretary Berlin: The last Thursday afternoon of each month.

Mr. Adler: I suppose that was the way it stood, but I think the date was changed afterward by the Executive Committee, of which I was a member. I'll make a motion to this effect: When this meeting adjourns, it adjourns to meet the first day of September.

The motion, on being put by the Chair, carried.

Mr. Adler: I now make the motion, supposing it will take the regular course:

Resolved, That on and after this date, the regular meetings of this Association shall take place on the afternoons of the first Saturday in each month, beginning with September and ending with June.

Mr. Clay seconded the motion, which was carried.

The Chair: Mr. Sullivan has something which he wishes to say on a subject of interest to the profession.

Mr. Adler: Mr. Chairman, before Mr. Sullivan makes his remarks, I would like to make another motion:

Resolved, That after the passage of this resolution, the mode of procedure for application for membership to this Association shall be made to correspond with that adopted by the Western Association of Architects at its last convention.

Mr. Adler: I do not know, but suppose all are familiar with the action taken at the convention, which was that, hereafter, anyone applying for membership to the Western Association must submit with the application for membership a description, illustrated by photographs, of at least three buildings of their own designing, and constructed under their own supervision and care; and these must be accompanied by a statement from the owner or occupants, that the buildings are satisfactory and they are satisfied with the architect's work. And before final action is taken on the application by the board, such investigation is made of the plans of the buildings to determine whether they are of a character, in the opinion of the board, to make the applicant a desirable member of the association, before submitting the applicant to a vote of the members of the association.

Mr. Sullivan: My recollection is, that the Executive Committee, some time ago, were requested to revise the constitution and by-laws, and it

might be given as further instruction to incorporate that in the constitution.

Mr. Adler: Suppose we make it as an amendment, that when the Executive Committee submits to the association the revision of the constitution and by-laws, they may be made to conform to the practice of the Western Association.

After some further discussion, participated in by Messrs. Sullivan, Patton, Beaumont, Clay and Adler, the motion, as amended, on second of Mr. Clay, was adopted.

The Chair: Now, Mr. Sullivan, we are ready to hear from you.

Mr. Sullivan: I wish to talk on the subject of a Protective League. When the idea of such an organization came up last fall, it was suggested that all the architects of the country should be united in one organization. It was argued by those favoring the movement, that such an organization should be a working organization, through, perhaps, a central committee, and it was assumed at the same time that the duty of this committee in a large sense, working in the interest of the entire profession, would be, in certain cases where equities were involved and not clear to have the matter transferred from the owner, that the organization should take the matter out of the hands of the individual architect, and carry it as far as may be through the courts, until a final decision was arrived at that would establish a settled principle. It was presumed that weaker members might tire of fighting for their rights, if not in the first courts, in the second, perhaps. It was claimed when the knowledge of such a strong organization became broadcast, when the country became thoroughly aware that the committee would not take up the petty quarrels between architects and owners, but would defend all equities of architects on principle to a finality, there would be less disposition for litigation with the unscrupulous. My own preference would be to see such an organization include the profession of all the associations of the country, rather than to have it confined to the efforts of a local association. Of course such an organization would require money to conduct its prosecutions and defenses, which should be subject to the call of the committee. I wished to introduce the subject, and should like to hear the views of the members upon it.

Mr. Patton: Mr. President, I have an experience which, it seems to me, might develop into a case that would properly come before such an organization. It is of a contract for certain work which was practically finished—only a small amount being incomplete. I had not personally examined the work for some little time, as it was done under the supervision of a superintendent. In making a certificate I happened to overlook one matter, and issued it for a larger amount than was due by the stipulations. A short time afterwards a defect in the work began to appear, and when the work was finally done it wasn't a first-class job. The owner thought the contractor should not be paid in full, and fell back on the architects. We assessed the contractor for damages as far as the amount still due him, and told him he should pay the owner a certain amount of money, and the owner that he had a good claim against the contractor. There the matter rests. The question comes up, how much damage has the architect to assess. It seems to me it should be governed by the money held back, and whatever else should be decided by a court of law between the owner and contractor. If it should be found after work has been accepted that unforeseen defects occur by fault of the contractor, and there is not money enough due the contractor to make the damage good, then comes up the question how far the architect can be held for issuing the certificate?

The Chair: It would seem as if in the first case the architect was to blame. Certainly he issued the over-certificate.

Mr. Patton: The point involved is that while some defects might have been discovered there are some that could not. It often happens that they appear afterwards through the fault of the contractor, and the architect ought not to be held responsible in such cases.

Mr. Sullivan: That would not be such a case as would come properly before such an organization. It is one, as I understand it, between the contractor and owner, which the committee would not be called to take cognizance of.

Mr. Adler: As long as an architect has the power to withhold money, he is to a reasonable extent responsible for its expenditure. I have two cases in my mind that happened within the last ten months. In both cases defective work appeared before settlement. In the one case, before the necessary work was done, it happened the contractor was taken sick, and it had to be done by other parties. When all was done, the bills were rendered for it to the contractor, and paid by him. There were two batches. The first was paid at once; the second, he didn't pay promptly, but paid it after a month or so. In the other case, the contractor quit business and had gone to Duluth, and could not be found, and the work was paid for by the architect, which I think was a much easier solution than to submit to a court of law.

Mr. Sullivan: Where the amount of money involved is small it is not so serious a matter, but when the amount gets up into the thousands of dollars the question of an architect's responsibility for defective work does become a very serious question. I have heard of some cases recently that are rather alarming: where the owners found the wall an inch out of line, ordered it taken down and put up again; and another case, where the owners came along and in the piers found bond stones cracked, and said they wouldn't have this, the architect was to give them a perfect building, and it was his business to see that cracks would not occur; that they should be taken out, and perfect stones put in at the expense of thousands of dollars; that they would withhold the money due on commission, and the architect could get it out of the contractor.

Mr. Clay: Had the architect passed upon the work? It seems to me that the contract is between the owner and the builder; but if the architect has passed upon the work there is a decided difference in that case and one where he has not passed upon it.

Mr. Adler: Just take the practical case cited by Mr. Sullivan, which is the experience of an architect well known in this country. Here the foundation was built and the stone covered with earth. There may be from five to a dozen stone cracked without imperiling the building. I do not think the architect will be responsible, after the building is completed

and apparently sound, because the owners have gone and excavated around the building and found, say, three cracked dimension stone, and insist that is not the kind of work paid for, and be obliged to replace them because the owners insist upon it.

Mr. Sullivan: I know of three cases today where such a situation of affairs is likely to result. The bigger the building the larger the commission, hence the larger will be the risk to the architect. It is a matter in which the responsibility of the architect should be definitely fixed.

After quite a prolonged further discussion, participated in by Messrs. Clay, Beaumont, Adler, Sullivan Patton and others, in which it was held there was a growing tendency to a species of blackmail being levied on architects by a class of owners and, otherwise, in other grave matters pertaining to the equities of honorable architects, there existed a necessity for some such league for mutual protection, Mr. Adler presented the following resolution:

Resolved, That Mr. Sullivan be requested to prepare during the summer months a circular letter to be submitted to the Executive Committee of this association, to be distributed by the committee among the members of the profession throughout the country, and that this be done on or before the first day of August next, and that the discussion of the subject be made the special order of business of this association, which shall take place the last Saturday in September, at which meeting the architects of Chicago and elsewhere that take an interest in the matter shall be invited to participate; that the circular be issued to the architects of Chicago and throughout the country, with the request that such as may take an interest and cannot be present, may send in their written opinions regarding the best method of procedure to meet this exigency in professional practice.

On being put to vote the motion prevailed unanimously, whereupon the meeting adjourned until Saturday, September 29

Association Notes.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The fortnightly meeting of the Edinburgh Architectural Association was held May 17, Mr. Hippolyte J. Blanc, president, in the chair. After some preliminary business, Mr. J. C. Watt, F. S. A., delivered the first of three lectures on the "Aesthetics of City Buildings." The subject was taken up in two main divisions: first, the abstract, embracing the natural and external aesthetics; and second, the concrete or artificial, including site, structure, and the entire range of ornamentation. Of the two branches, attention was last night confined to the philosophical; and the views of various authorities on beauty, taste and form, from Phidias to Hogarth and Hamilton, canvassed. Their disquisitions had been engrossed by comparisons of straight lines with curves, to the exclusion of emotion or the play of mind, but their deficiency in this respect had been supplied by Herbert Spencer, who estimated aesthetic pleasure according to the number of powers called into play. The aesthetic sentiments proper were composed of the varied emotions excited in the mind by association. Here nothing but mental activity was involved, and this the lecturer regarded as insufficient to indicate the scope of the subject. He preferred to regard aestheticism as a mixture of beauty and emotion, and the emotion excited by association must be pleasant both as regards the present, and as regards historical affinities. The principles thus evolved were then applied to city building, and the important part which nature and history had played in the composition of a town exhaustively dealt with, especially with regard to the origination of styles, the castellated and Scottish baronial in particular. With reference to the artificial division, letters were read from Professor Blackie and Sir James Gowans. The Lord Dean said as regards Edinburgh: "The only plan (for controlling architectural appearance of buildings) I can think of is, that the Dean of Guild Court should have control over the exterior of buildings, or anything that affected the amenity of the city; and to give confidence to the citizens that this power would not be abused or dealt with by men whose taste might not be of a high order, that there should be added to the Court the president of the Royal Scottish Academy, the president of the Architectural Association, and a citizen whose taste on such matters was recognized. Such an arrangement would, no doubt, help to prevent unsightly erections, as well as other incongruities which tend to destroy the beauty of our ancient stone-built city." The discussion of the second part of the subject was postponed until October. At the conclusion, the lecturer was accorded a very hearty vote of thanks for his paper, after which the meeting closed.

KANSAS CITY SOCIETY OF ARCHITECTS.

The annual meeting of the Kansas City society was held on April 2, and the following officers were elected for the ensuing year:

President, E. F. Fassett; vice-president, W. S. Matthews; secretary, G. M. D. Knox; treasurer, H. E. Hill; Executive Committee, A. Van Brunt, James Oliver Hogg, W. W. Polk and the president and secretary.

CHICAGO CARPENTERS' AND BUILDERS' ASSOCIATION.

The regular meeting of the association was held May 5, President Hearson in the chair. The subject under discussion was the report of the committee of the National Association of Builders on rules and conditions under which estimates should be submitted by contractors in the building trades.* The rules were taken up section by section, and were generally indorsed. In regard to definite specifications and plans, the speakers took the ground that there was no point upon which contractors were more imposed upon than this, and architects should be educated up to making their specifications more definite. The clause should be made even more strong. That for specifications to say that "anything that is shown in the plans and not in the specifications shall be included in the estimate" is all wrong. In the clause relating to cutting and changing work of one mechanic in placing the work of another, the unanimous sense of the meeting under the present conditions was that this clause, "the carpenter shall do all the cutting necessary," should be eliminated, and cutting should always be paid for when done the second time, or plumbers and others should have their own carpenters to do the necessary cutting. Upon the adoption of article 9, the matter was laid over to the next regular meeting. The

* For rules, see page 24, Vol. XI, No. 2.

president instructed the secretary to notify the presidents of the various building associations, requesting them to meet him at the Builders' and Traders' Exchange, to consult upon the rules for obtaining estimates.

The meeting was called May 16. There were present: James John, secretary of the exchange, and the Carpenters' and Builders' Association; E. Baggot and Andrew Young, of the Master Plumbers' Association; M. Benner, representing the iron interest; William Iliff, the masons; P. B. Wight, the fireproofing interests; and William Hearson, the Carpenters' and Builders' Association. The rules were generally discussed, and at a subsequent meeting of the exchange were indorsed by that body.

THE ARCHITECTURAL LEAGUE OF NEW YORK.

The regular reunion and dinner of the association took place May 7. The committee on current work provided for the entertainment and instruction of the league, a conference, by Mr. A. F. D'Oench, superintendent of the department of buildings, of the city of New York, on "Errors in Construction." A representative exhibit of the architectural efforts of the pupils of three of the most important art institutions of this country was a feature of the meeting. These included the technical classes of the Metropolitan Museum of Art, New York; school of mines, Columbia College, New York; architectural department, Cornell University, Ithaca, New York.

Johnstone, Norman & Co., of England, exhibited for the first time the designs of Alma Tadema, R. A., for the piano, and other furniture of the well-known music room in the New York residence of Mr. H. G. Marquand. These remarkable pieces are all in ebony, inlaid with delicately tinted ivories, coral, and mother of pearl, which are introduced in pure Greek lines, with fine artistic effects and results.

DETROIT ARCHITECTURAL SKETCH CLUB.

The architectural draftsmen of Detroit have organized an improvement association to be known as the "Detroit Architectural Sketch Club," for which the constitution and by-laws have been adopted.

At the first semi-annual meeting held Monday evening, May 14, the following officers were elected:

President, J. L. Saunders; vice-president, A. D. Adamson; secretary, C. A. Fullerton; treasurer, J. B. Nettleton. The executive council consists of the officers of the association and three active members, A. Kolm, N. H. Grills and W. E. Pasco.

Meetings will be held regularly every alternate Monday evening.

The club starts out with good prospects and about twenty-five members, with promise of assistance from the architects, the latter being eligible to honorary membership. The methods and objects of the club are the advancement and improvement of its members in subjects pertaining to architecture, by readings, lectures, competitions in design and drawing, visiting selected buildings, etc.

It is hoped that much good may result from the movement. Communications should be addressed to C. A. Fullerton, secretary, 18 and 19 Burns Block, Detroit, Michigan.

Correspondence.

Editors Inland Architect:

I hope these few lines will so far interest you as to receive mention in your paper as a scientific matter, for the benefit of your readers. A long-wanted instrument is one for the purpose of testing air so as to find instantly the amount of oxygen and impurities contained. This instrument is called "Oxometer," and was invented by Wm. Scharnweber, of Chicago. It consists of a little lamp in combination with a thermometer, which indicates the heat by way of combustion. The amount of oxygen in the air will give a certain amount of heat. Air that contains 21 per cent of oxygen is considered pure; if less oxygen is found, there are impurities in the place of it. Therefore, in a room, for instance, where we breathe 16 per cent of oxygen there is 5 per cent of impurities. The kind of impurities is not always important. In one sense, we cannot live longer in nitrogen than in carbonic acid gas or in any other kind of gas. We must have the oxygen to live on, and the nearer we get to 21 per cent in the air the better it is for health. At the present time our systems of ventilation are so wrongly constructed that the average air in dwelling-houses contains about 18 per cent of oxygen, mostly on account of furnaces that consume oxygen. Our office buildings, heated with steam, average 17 per cent of oxygen only, on account of not admitting a sufficient supply of air. Our public buildings and schools are generally found to contain less than 16 per cent of oxygen. This shows that we live too much in impure air. On this account sickness breaks out, such as typhoid and scarlet fevers, and other diseases resulting from poisoned blood. Several schools in Chicago were tested with this instrument: the result at the Thirty-fifth street school was 20 per cent oxygen, 1 per cent impurity; Douglas school, 17 per cent oxygen, 4 per cent impurities; the Brown school, 16½ per cent oxygen, 4½ per cent impurities. These schools were tested by the health department and reported in good condition. Then why should the complaints come so thick from the Brown and Douglas schools on account of sickness? The fault lies in the wrong method employed for analyzing the air. The old way and general way is to search for carbonic acid gas. This is, in the first place, very difficult to do; second, it is only one kind of impurity, where many other kinds of impure air might be present. The best way is to find the amount of oxygen. A test was made last April at the county jail, in the basement, whereby the health department states: "The air was very bad from dead rats and from the leaks in the waste-pipes." Prof. Long, by analysis, found the air there to contain 4 parts out of 10,000 parts carbonic acid gas. His statement was, "the out-door air is 3 parts out of 10,000." By this statement the air in the basement was equal to pure air. At the same time it was filled with other impurities, as shown by the oxometer. Only 19 per cent of oxygen could be found, therefore 2 per cent of impurities were in the basement air. More attention should be paid to ventilation. In general, ventilation is misunderstood. Most people think that the warm air is the impure air and cold air is the pure air. This is wrong. Perfect ventilation is to receive the highest per cent of oxygen in the air we breathe.

WM. SCHARNWEBER.

Our Illustrations.

Double house at Detroit, Mich.; Irving K. Pond and Allen B. Pond, architects, Chicago.

Office building, Kansas City, Mo.; Van Brunt & Howe, Boston and Kansas City, architects.

Wholesale stores for Mrs. E. S. Fabian and estate of Col. W. S. Johnston, Chicago; S. M. Randolph, architect.

Houses for Victor Falkenau, Chicago; Adler & Sullivan, architects. Built of blue Bedford stone, copper bays; finished in hardwood; plate glass; cost \$24,000.

Buffalo Architectural Sketch Club competition for a gate lodge: First place, J. A. Johnson; third place, M. G. Beierl; fourth place, R. A. Greenfield. Second place was given to the design of F. R. Fuller. It is a well-executed water color, which, while making an attractive picture, unfortunately renders it unavailable for publication.

Fairmount College, Wichita, Kansas; Patton & Fisher, architects, Chicago. This is the main building of a large group designed for a seminary for young ladies, and stands on the brow of a hill commanding a view of the city. Twenty acres or more have been reserved for the buildings and grounds. In the basement there are nine music rooms, laboratory, physical and chemical lecture room, museum, etc. First floor—reception rooms, library and reading room, and four class rooms. Second floor—chapel, secretary's office, and nine class rooms, gymnasium and dressing rooms, with baths in the third story. Materials—stone, pressed brick, terra-cotta and copper. Cost of main building, \$50,000; the walls are now up to the roof.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

Residence for John Davis, St. Louis, Mo.; Henry Isaacs architect.

Residence for John R. Lionberger, St. Louis, Mo.; H. H. Richardson, architect.

Residence of Charles W. Casgrain, Detroit, Mich.; Mason & Rice, architects.

Residence for J. L. McWilliams, No. 3945 Lake avenue, Chicago; Cobb & Frost, architects.

Residences of Mrs. McCormick and M. Selz, 1715 and 1717 Michigan avenue, Chicago; Adler & Sullivan, architects.

The Owings office building, Chicago; Cobb & Frost, architects. Photograph from water color, by Paul Lautrup. It is to be built on the south-east corner Dearborn and Adams streets, and work has already commenced. Building to consist of cellar and basement, the floor of which is two feet below grade, to be used for offices. Above this are to be bank floors, then eleven floors of offices, making fourteen stories in all. Basement, first and second floors granite; above this, building to be of special made brick and terra-cotta to match the granite; roof, red tile; copper trimmings. Three elevators. Main entrance hallway and main stairs entirely marble, with mosaic floor; all corridors above marble and tile. Building to be constructed of steel and fireproof material throughout, and lighted with electric light.

Obituary.

MR. JOHN N. GLOVER, one of the oldest and most prominent plasterers in Chicago, and a member of the Builders' and Traders' Exchange, was suddenly stricken with paralysis on the 18th ult., near the Grand Pacific Hotel. He was taken to his home, on West Monroe street, where he lingered, unconscious and speechless, until he died, Monday, May 28. Mr. Glover was sixty-one years of age, and apparently hale and hearty.

A delegation from the exchange was in attendance at the funeral, May 31.

At a meeting of the exchange, May 31, the following resolutions were passed:

WHEREAS, Mr. J. N. Glover, a member of this exchange, has been called from works to rewards, therefore be it

Resolved, That this exchange sincerely mourns the loss of one of its oldest and most valued members, whose life and example was such that we can all point to it as worthy of emulation.

Resolved, That we tender to the family of the deceased our sincere sympathy in their hour of bereavement, and that a copy of this resolution be furnished the family of the deceased and spread upon the records of the exchange.

A New Sanitary Apparatus.

A SANITARY apparatus for use in schoolhouses, etc., where there is no sewerage, or where it is desired to destroy excrement, has been patented and is being placed by Fuller & Warren Company, the well-known furnace manufacturers. This consists of a brick vault the length of the closets, and about three feet deep by two feet wide. The bottom is an iron grate and the top is made of boiler iron, covered with asbestos, and covers for the seats are provided for use when fire is applied. At one end of the vault is a small firebox. A ventilating chimney is connected with the vault, and a current of air is continuous downward through the grated bottom and outward through the ventilating shaft. When a troublesome quantity of matter has collected, the janitor throws a shovelful of ordinary pine, kerosene-soaked sawdust into the pit, sets fire to it, and the flame sweeps through the whole length of the closet and burns up the entire contents, leaving only a few handfuls of light ashes in their stead. The operation of this apparatus is pronounced perfect, and it is claimed will put an end to the evils resulting from soil saturation, sewer gas and the nuisances complained of from defective plumbing. In a pamphlet, "The Ultimate of Sanitation," published by Fuller & Warren Company, Chicago, much valuable information upon the working of this apparatus is given, which certainly seems to have all the elements of a successful aid to perfect sanitation.

Mosaics.

MESSRS. LORD & GRISWOLD have recently furnished St. Lawrence marble for the following residences: G. B. Kane, on Ashland avenue, S. A. Maxwell and Mr. Provoost, by Architect L. B. Dixon; that of Mr. Walker, by Architect A. J. Thain, and J. S. Carter, by Architects Charnley & Evans.

R. H. ROBERTSON, architect, has intrusted to Messrs. J. & R. Lamb, New York, the commission for the furniture for the new Bohemian Presbyterian Church of that city. There are a number of pieces, all of polished oak, richly carved, including a large pulpit, communion table, font, seats, etc. The Messrs. Lamb have also furnished a handsome cover for the communion table. This is of white gros grain silk, beautifully embroidered and trimmed with silk fringe.

It is pleasing to note the rapid progress being made by our sister cities of the South. In a neat little pamphlet issued by Wm. Aiken Kelly, city assessor of Charleston, S. C., a complete record of the rebuilding of the city since the earthquake is given, showing that 6,956 residences and other buildings have been built or repaired at a cost of \$4,294,775. The report also gives the receipts and shipments for the fiscal year, and the outlook for the coming year in all lines of trade.

DRAINAGE of a house is the reproduction, in a neat pamphlet form, of an article on this vital subject, by William Paul Gerhard, C. E., of New York City, originally published in "Homes of Today." A short review would fail to give a just idea of the author's views, and, therefore, it is commended to the perusal of architects who may glean some valuable suggestions therefrom, if they do not get some altogether new ideas. It is certainly deserving of a careful perusal.

MR. JAMES G. WILSON, of New York, manufacturer of the "Rolling Venetian Blind" has perfected it by several important improvements. Instead of stringing the slats, as formerly, on single wires, they are now hung in a seven-strand and wire-cable; and instead of the rubber thimbles for separating the slats, metal separators are used, enameled in imitation of the color of the woods used. It is now not only handsomer in appearance, but, in connection with its compactness and convenience, considered indestructible.

THE "Metallic Hip Shingle" is a comparatively recent patented device by W. H. Prentice, for purposes which the name readily suggests. It has received a very flattering commendation from architects who have tested its claims, which are: simplicity and economy; taking the place of boards and strips; making wind, water and snow-tight joints; will not curl or get loose, and has no exposure of nails, besides making a neat and ornamental finish. It may be applied to new or old roofs. The Metallic Hip Shingle Company, of Toledo, Ohio, may be addressed for particulars.

HERETOFORE beams and channels for architectural purposes have not been manufactured in this country west of Pittsburgh, but recently an arrangement has been made with the North Chicago Rolling Mill Company by Clark, Raffin & Company, of Chicago, who are now ready to supply the western market with steel beams and channels. The product of the Chicago mill will be handled entirely by Clark, Raffin & Co. Considerable progress has been made already in the direction of rolling a large stock of all regular sizes, so that all orders can be promptly filled.

THE special attention of readers is invited to a new feature in the manufactures of the Cincinnati Corrugating Company, as shown in another column of this issue. This new departure is the manufacture of corrugated steel arches. They are claimed to be far superior to anything now in use, and will be received by the trade as "a long felt want." The Cincinnati Corrugating Company have unusual facilities for turning out prompt and accurate work, and will gladly give any information desired. It would be well for those desiring to purchase material in their line to correspond with them.

ONE of the latest improvements in building hardware is a novel and very complete blind adjuster manufactured by B. D. Washburn, of Boston, Massachusetts. It is made in three styles; one with holes for wire hoops to catch on the sills, one with an elastic sill catch, and the third with a "secure lock," preventing the possibility of the hook unfastening from its hold on the sill. The maker claims these are the best goods on the market and ten per cent lower, and to support his claim is willing to supply them for use on reputable architect's order with the understanding that they can be returned if they do not prove perfectly satisfactory.

OFFICIAL statistics show the production of building materials in Canada in 1887 to have been as follows: Cement, 69,843 barrels, of a value of \$81,909; flagstone, 110,925 square feet, value \$10,811; granite, 15,128 tons, value \$98,995; gypsum, 154,000 tons, value \$155,277; lime, 2,303,667 bushels, value \$389,369; marble and serpentine, 242 tons, value \$7,845; sand and gravel (exports), 180,860 tons, value \$30,307; slate 7,357 tons, value \$89,000; tiles, 8,355,000, value \$136,112; whiting, 500 tons, value \$600. Considering the vast mineral resources of Canada, the production is insignificant; but it is a satisfactory sign that it is yearly increasing.

It is a common experience that those devices in mechanics which are most valuable are the simplest in construction and material. Retrospect any of the living inventions of the day and note the complexity of the original thought, and then trace them down to where they become practical entities, and you will find, invariably, it is when all the complexities have been eliminated and nothing has been left but "the survival of the fittest" parts. In many instances these desirable ends have been arrived at by what might be termed accident. The "Jenkins' Automatic Air Valve" is in point. "The Jenkins'" packing is familiarly known among steamfitters and engineers. Quite recently, in a special form, it has been applied in the construction of a very simple and reliable air valve, which may be described in a few words, so that a fair comprehension of its *modus operandi* may be had. Consider the valve to be a short cupped tube with a screw-threaded arm for a connection, which is the inlet for the steam. At

the lower end of the tube is the outlet, tapped, to connect a drip pipe or cup. In the center of the tube (valve) is a steam chamber in the center of which is a cylindrical "plug" of the Jenkins' packing resting on the "outlet," and set and held in its place by a set-screw operated from the capped end of the tube (valve). This plug is the secret of the valve's automatic action. When the steam is let in the chamber it surrounds it, causing it to expand, and, being screwed down to its seat, when the steam is shut off the plug contracts and opens the valve—that's the whole of it. It will be seen nothing could be more simple, and the action is direct.

A NEW, simple, neat and convenient device—patented in 1886—for locking and holding one-light window sashes in place, at various elevations, known as "Wiggers' Patent Sash Lifters," presents claims for recognition as an utility in house construction which are far from being ignored by builders over the country. It is comprised of a metal strip—steel or brass—molded to fit the bead on the side-roll of the sash, extending the entire length thereof and attached by escutcheon pins. Each strip has four "catches" equi-distant. They are furnished in brass, nickel-plated, enameled, japanned, or unfinished, to be finished in color with the painting of the sash. Brainerd & Co., No. 97 Chambers street, New York, are the manufacturers' agents.

HAYKEN & Co., interior decorators, of which Martin Hayken is the controlling spirit, report their business very good. They have in hand several large contracts, and among them some requiring the highest skill in decoration. The firm also gives careful attention to house and sign painting. They make a special study of each order intrusted to them, always striving to obtain harmonious and artistic color effects. They submit designs and estimates on request, and are conveniently located at 131 Wabash avenue. Mr. Hayken is very favorably known to the building public of Chicago and vicinity through the many important contracts carried out under his supervision; and many prominent public buildings and private residences are examples of his artistic conceptions.

THE question of building in cold weather is naturally one of great importance in Scandinavia, and the Stockholm Building Association recently appointed a committee charged with carrying out some test work. This body has had four series of pillars, built of various kinds of brick, stone, mortar and cement, in cold varying from 8° to 15° C., and as soon as the weather has become fairly warm and dry, another series of pillars is to be built, exactly of the same material and in the same manner. Tests of various kinds will then be made with the pillars. It is expected that these experiments will go far to solve this problem. It is also proposed to erect a series of similar pillars during the present or next month, when the weather is warm and sunny during the day, but frosty at night, and compare their solidity with that of the former.

I. P. FRINK recently received the following letter in regard to the merits of his methods of lighting a large auditorium:

NEWARK, N. J., March 31, 1888.

MR. I. P. FRINK, 551 Pearl street, New York:

DEAR SIR,—The members of the Building Committee of the Centenary M. E. Church take this occasion to express to you their appreciation of the efficient manner in which you lighted the main audience and lecture rooms of their new church, and have no cause to regret having left the entire lighting of the church to your judgment. The large reflecting chandelier, with its one hundred and thirty imitation candle gas burners, lighted with an electric spark, thoroughly illuminates the main audience room so that the finest print can be read in the most remote corner of the room, with a light that is agreeable to the most sensitive eye; the fixture is of a beautiful design, harmonizing with the architecture, and is second to no other feature in decorating and furnishing the church. Those in the lecture room are equally satisfactory. There is absolutely nothing to criticize in the design, quality, finish, lighting capacity, or the time taken to finish the work.

Very truly yours,
J. K. OSBORN, Chairman.

A RECENT number of the St. Paul *Globe* says: "After a full and deliberate consideration of the merits of the various grates, it was moved by Mr. Dawson that the bid of J. F. Tostevin for ventilating grates be accepted. The motion was unanimously carried. Mr. Tostevin is agent for the Edwin A. Jackson & Bro. grate. His bid was the highest, but the commission was of the opinion that the Jackson grate was the cheapest for the money." The contract alluded to was for over one hundred grates for the new county court house at St. Paul, Minn. In the contest there were the exhibits of Edwin A. Jackson & Bro., of New York, manufacturers of the Jackson ventilating grate, of W. H. Jackson & Co., who represented the Jackson sanitary grate of the Omega Grate Company, who showed the Omega fireplace furnace; also of the Hess Grate Company, of Chicago, and the Miller Grate Company of one of the North American cities.

THAT the architectural iron, brass and bronze work is making rapid progress in this city is evidenced by the fact that the well-known Winslow Bros. Co. have been obliged to remove their works from West Monroe street to larger premises at 376 to 396 Carroll avenue. The new buildings erected by this firm are complete in every particular, the drafting and pattern-making rooms are large and well lighted, and every new device or improvement to carry on an extensive business has been put in requisition. This is especially true in regard to the apparatus for Bower-Barff work, which the Winslow Bros. Co. not only use for their own work, but execute for others at custom rates. The latest improved Butnam boilers furnish the steam for a powerful Eclipse engine, which supplies the motive power for the entire works. This change of location will enable the Winslow Bros. Co. to carry on their extensive business with much greater facility and promptitude.

A SYSTEM of fireproof construction, which has been patented in London, is described by the *British Architect*. In this latest method the floors consist of a series of small arches, formed of lengths of rolled steel of quadrant section, riveted together at the top through flanges, the arches being similarly connected at the springing. Over these arches is laid a bed of concrete, in which the joists which carry the floor are imbedded. This gives a very strong fireproof floor with a small depth. The under side can be finished with a flush ceiling, instead of one broken up by beams projecting below the ceiling, as at present in ordinary construction, where very long and wide floors are to be supported by heavy girders. This principle of arched flooring is also specially applicable to bridge

decking in engineering construction, for which purpose it is already being employed. The fireproof columns are formed of four quadrantal segments of rolled steel, similar to those used for the floors, with an inner central steel stanchion tied to the outer shell, the intermediate space being filled in with concrete, and the whole forming a compound column. Should the outer shell be destroyed by fire, the patentee claims that the inner stanchion will still be preserved intact and will continue to carry its load with safety.

MERCHANT & Co., of Philadelphia, have just issued the third edition of their valuable pamphlet, "Important to All Interested in Good Roofs," which in concise form gives a number of facts about the manufacture and relative values of roofing plates and the laying of a good roof. This roofing plate concern is not only making a strong effort to place the merits of their brands of tin-plate before the architects of the country, but seek to point out to architects and owners the danger of accepting bids for tin roofs without thoroughly investigating the quality of the tin and the reputation of the house selling it. They charge that the disrepute into which tin roofs have fallen in some localities is due to the use of a poor quality of tin furnished by unscrupulous contractors, and state that a tin roof should last forty or fifty years. The printed matter circulated by this house is full of valuable general information upon the subject of tin roofs, and, like the pamphlet noticed, should be read by every intelligent architect.

The initial number, Vol. I, No. 1, under date of May 1, of a new specialty journal, bearing the title *Stone*, is received. It is published at Indianapolis, in the interest of producers, workers and users of stone, marble and granite; D. H. Ranck is managing editor; L. H. Gibson, editor. The *debutante* makes its bow with a prospectus, followed by twenty-six pages of reading matter and illustrations, the principal illustrations being the accepted design of the Indiana Soldiers' and Sailors' Monument, and a proposed monument to Audubon, to be erected in Trinity Cemetery, N. Y. The other illustrations are of capitals, panels, rosettes, crockets, finials, etc. A price current closes the number. As a work of the typographic art it has nothing to boast of; but, no doubt, will improve in this respect. The number before us is quite readable. The field is new, and we hope it will prove one that will return a rich harvest to the publishers who have entered it. We welcome the *Stone* among our exchanges. Terms \$2 a year in advance.

J. DUNFEE & Co., Chicago, have fitted up their new showrooms, in a manner that well illustrates the popular liking and use of "wood carpets," so extensively manufactured at Nos. 204-212 South Clinton street, by this firm. It is a beautiful exhibit, one that merits the many calls of inspection that are paid to it daily. Not only is the floor covered with the rich parquetry, but the walls also, the elaborate effect being made up of as many as twenty-five different ornamental designs in woods, at prices ranging from 11 to 50 cents per square foot. Among many recent Chicago orders, besides extensive ones to the East and elsewhere, are those for the residences of F. C. Pope, W. W. Wilcox, J. E. Miller, J. P. Odell, W. H. Austin, J. H. McGay, the Bundy House, Mr. Clawley, while the firm's branch houses at Milwaukee and St. Louis are equally busy. The showrooms are at Nos. 104-106 Franklin street, corner of Washington, where resident architects and those visiting the city can see at a glance the possibilities of wood carpet and parquetry flooring.

A VISIT to the works of the Western Sand Blast Co., corner of Clinton and Jackson streets, Chicago, is full of interest to one not acquainted with the process by which the most elaborate designs are engraved upon glass. Briefly, the process is this: a plate of glass is covered with a thin layer of tin foil; on this the design is traced and then deftly cut and lifted out, leaving the remainder of the foil intact. In this condition the plate is given a thin coating of melted wax, and before this is too much hardened the rest of the foil is stripped off, which leaves the design clear cut in wax on the plate. The plate is then put into a huge box filled with machinery, where the sand blast acts upon the glass, cutting all the surface not protected by the wax, and bringing out the design perfectly. Another interesting department is that devoted to beveling and polishing glass. Intimately associated with the Western Sand Blast Co., is the Brown Bros.' Manufacturing Co., manufacturing, at the same location, Hyatt's Patent Prismatic "Cement and Lead Band" sidewalk lights, and vault lights. Both establishments are complete in their facilities and highly prosperous. Edwin Lee Brown, the president of both companies, is one of the most public spirited citizens of Chicago.

The secretary of the Cincinnati Corrugating Company has been sending out a timely circular to builders, mechanical engineers and their correspondents generally over the country. As it contains many useful and practical suggestions, a few extracts from it are made for the benefit of readers. The circular says:

First inviting your attention to the fact that the regular lengths of corrugated iron which we carry in stock are 5, 6, 7, 8, 9 and 10 feet, we note that, almost invariably, architects and mechanical engineers, in specifying lengths of corrugated sheets, or spacing supports therefor, on iron framed roofs, name lengths which are different from those carried in stock, obviously necessitating delay and often greater cost, as in such cases the required lengths must either be rolled specially or cut from stock lengths which are carried by all the larger makers of corrugated iron. We judge that in planning disposition of purlins or other supports for the corrugated sheets, the rule seems to be to place them equally distant between centers. But why would it not be as well from any standpoint, or, better, for reason previously indicated, to plan to use regular lengths, not necessarily using one length only on each roof, but any regular lengths, or such as can be cut therefrom with least waste? There is far more corrugated iron now used on wooden than iron framing, and the use, generally, of corrugated iron, is very largely increasing, hence considerable stocks of regular lengths and of the different gauges (Birmingham-Haswell) are kept at different points throughout the country, we having today over one thousand five hundred tons in stock. Our corrugated iron is made under a press, and not by rolling, as is usual; is coated with the best metallic paint thoroughly reground in pure linseed oil, and the $\frac{2}{3}$ inch corrugated sheets are all provided with our patent edge corrugations, explained in our catalogue, pages 9 and 22, making them unequaled for effectiveness.

AMONG American sculptors Franklin Simmons is now the most celebrated in Rome, says an exchange. He has resided there for a quarter of a century, during which time he has executed many orders from this country. His latest work is a seated statue of the poet Longfellow, of heroic size, which is designed for the city of Portland, Me., the place of

Longfellow's birth. At a recent reunion in the sculptor's studio, this statue was on exhibition, and it was universally adjudged to be one of the most successful of Mr. Simmons' works. A son of the poet asserts that it is the best likeness of his father in existence. Mr. Simmons has executed portrait busts of many distinguished Americans: Grant, Sherman, and quite recently of Marion Crawford, the novelist, besides statues of Washington, Roger Williams, Governor King and Senator Morton. He is best known to our people probably by the naval monument at Washington. During the present century America has been more ably represented by her sculptors in Italy than any European nation.

THE following circular, received from the well-known Smith & Anthony Stove Company, of Boston, announces such an important acquisition to their already large business that we publish it in full, knowing that it will be of interest to readers:

IMPORTANT CONSOLIDATION.

48, 50, 52 and 54 Union street, Boston, April, 1888.

We have acquired all the patterns, stock and good will of the old established firm of F. Morandi & Son, 48 and 50 Union street, Boston, which includes all the patterns of the celebrated Whitley ranges, ovens, kettles, etc., formerly made by the well-known house of E. Whitley & Co.

The business of F. Morandi & Son will in the future be consolidated with ours, making us the largest manufacturers of high grade hotel and restaurant goods in the country.

We have taken their store and it will be joined to ours, giving us an unrivaled sample room for the display of the Hub stoves, ranges and furnaces, as well as the hotel specialties we have added to our line.

Mr. Ernest L. Morandi will have charge of the hotel and restaurant department, and we are prepared to estimate on kitchen outfits, from the smallest restaurant to the largest hotel or public institution.

The reputation of F. Morandi & Son and E. Whitley & Co., for fine work, and for skill in planning culinary arrangements is excelled by none, and this, added to our own increased facilities, enables us to guarantee promptness and satisfaction in this department. Our ample resources will enable us to enlarge the line of goods, adding every improvement that is desirable, and giving our patrons an assortment combining the best and newest constructions at the lowest possible prices.

It is our purpose to make this branch of our business superior to any other house in the trade, and the headquarters for every requisite in its line.

We shall carry a full line of repairs for all the above goods, and can fill orders for these promptly.

You are invited to inspect our warerooms, and all applications for catalogues, prices, etc., will receive our best attention.

Anticipating your orders in this department, we remain,

Very respectfully yours,

SMITH & ANTHONY STOVE COMPANY.

Railroad Notes.

THE Great Rock Island (C. R. I. & P. R'y) offers a choice of routes beyond Missouri river, on both single and round-trip tickets. First-class excursions every week. Rates as low as the lowest. Trains composed of elegant day coaches, superb dining cars, magnificent chair cars and Pullman palace sleeping cars. For full information, address E. A. Holbrook, G. T. & P. A., Chicago, Ill.

JOHN MCGLENSEY, of New York, a popular member of the National Association of Builders, and J. A. Jarvis, of New York, recently visited Chicago, and made a flying trip to St. Paul and Minneapolis. They went by way of the Wisconsin Central, and appreciated the elegant dining-car service on that line. Returning, they were so fortunate as to secure passage on the trial trip made by the Chicago & North-Western vestibule train, the appointments of which, as well as the trainmen in charge, awakened the enthusiasm of these New York gentlemen. While in the city, Mr. McGlensey spent the time in seeing everything, from the boulevard system and office buildings to the stockyards, and expressed themselves as having seen the *next* great city to New York.

MAGNIFICENT vestibule express trains, built expressly for this service, with all the latest improvements, now run daily each way between Chicago and Council Bluffs, over the great Rock Island route, time sixteen hours. This is a splendidly appointed series of continuous parlors on wheels, including elegant dining and palace sleeping cars. No noise, no dust, no swaying of coaches, no cold drafts of air, no slamming of doors, but restful comfort the entire journey. No potentate of the Old World travels in a more princely style, or commands greater luxuries or more of them than those going west can now enjoy, if ticketed to or from Council Bluffs via the great Rock Island Route. This train also connects at Omaha with the "Overland Flyer," going through to and from Chicago and San Francisco, Portland, Oregon, and Los Angeles, in eighty-seven hours. Tickets and rates by the Rock Island Vestibule no higher than are charged by lines having greatly inferior accommodations.

Two books that are well worth an hour's perusal by anyone who feels the effects of a hard season's work and would "take a rest if they only knew where to go," are published by the Wisconsin Central and the Northern Pacific Railway Companies. Profusely illustrated and well written, they describe pleasantly and clearly the picturesque country accessible between Chicago and the Pacific Coast. The Wisconsin Central route is, of all the northern roads, the most popular with fishermen and pleasure seekers generally. It scarcely leaves the city before the wild woods, myriad lakes and stretches of prairie of Lake county are passed, and at each station conveyances are in waiting for expected passengers, showing that this is the great thoroughfare used by those who love a day in the country with rod or gun. The evening train leaving the city at 5 P.M., Saturday night, is always crowded with gentlemen and a fair proportion of ladies, too, seeking Lake Villa, Antioch or some other of the dozen popular resorts in Lake county. Then, for longer trips, the road runs through the State of Wisconsin, from south to north, and bringing those in search of health to the far-famed Waukesha, or to the newer, but as attractive resorts farther north, till the region of Lake Superior is reached. Here the trout streams rival any in the country. In the small lakes that stretch out in chains through the vast pine forests the "gentlemanly" black bass and the "kingly" muskallonge are found in greater quantities and grow to greater size than at any other known spot. The line connects with the Northern Pacific at St. Paul, which carries the traveler into the "wonderland" of the West. Architects seeking rest cannot do better than send to the Wisconsin Central offices, Chicago, and obtain copies of "A Summer

Jaunt" and "Wonderland." The statements they contain fall far short of actual experience in praise, and are truthful in their description of the different places that attract the traveler en route.

DURING the season, June 1 to October 1, a full line of tourist and cheap excursion tickets, via Chicago & Grand Trunk Railway, will be on sale in Chicago at 103 South Clark street, Palmer House, Grand Pacific Hotel, depot, corner Dearborn and Polk streets, and at principal offices in the country, by which all seaside and mountain resorts in the East can be reached at very reasonable rates of fare. The route of these tickets is by the Chicago & Grand Trunk Railway from Chicago, thence by Grand Trunk main line, via Toronto, or by Great Western division, by way of Niagara Falls; or both Niagara Falls and Toronto may be visited on the same trip, connecting with steamers on the St. Lawrence river, passing by daylight the Thousand Islands and wonderful rapids of that noted stream, and under the world renowned Victoria Bridge, to Montreal; thence to Quebec, River Saguenay, of the grandeur and solemnity of whose scenery no words can convey an adequate idea; White Mountains, Lake Champlain, Lake George, Saratoga and Hudson river; or via Portland, the noted Casco Bay and watering places on the Atlantic Ocean beaches in that vicinity. Be particular to have your tickets read from Chicago by the Chicago & Grand Trunk Railway, which line passes through the finer portions of Michigan. Its track is entirely steel rail, well ballasted, rivaling in smoothness its older competitors; its passenger coaches are of superior style and finish, combining all the latest improvements for the comfort and safety of its patrons. Passengers for Canada now have their baggage examined, passed customs and checked to destination at our depot in Chicago, thereby avoiding annoyance or delay at the Canadian frontier. Berths in the sleeping cars and full and perfect information can be secured at 103 South Clark street, 110 Washington street, Palmer House, Grand Pacific Hotel, and at Dearborn Station, corner Dearborn and Polk streets, Chicago.

Building Outlook.

OFFICE OF THE INLAND ARCHITECT, }
June 10, 1888.

Speaking in a general way, the volume of business so far this year has been 10 per cent less than the volume up to this time last year. This alone, in view of the great increase in machinery, and in manufacturing capacity, is sufficient to impart to prices a downward tendency. A further depressing tendency was given by the falling off in railroad building by the apprehension among the people generally that they were going too fast, by the tariff agitation, regardless of its wisdom or unwisdom, and by some less discernible influences, all of which, in a cumulative way, have kept prices gently receding, in spite of the powerful trade and manufacturing combinations that have arisen, like the brigades and divisions in war times, to protect assailed rights and interests. The general impression is that less building, less manufacturing and less exchanging will be done this year than last, and it is true that all the indications point that way. This need be no cause of disappointment except to those who in consequence will have no business to do or less to do. The downward tendency in prices will probably continue until fall. So far as political influences affect trade, if they really do affect it, that factor will be eliminated. The season can be safely discounted now by those who have no blending interests at stake. The house builders are doing less in cities but more in country districts. Building material is in active demand and mainly at the prices realized last year. The distribution of white pine, west and east, will come up pretty near to last year—high water mark. Yellow pine is steadily gaining ground even in white pine territory, and so are the hardwoods from all sections, especially those from the South. The great lumber interests have nothing to complain of. The mills are busy. Prices are remunerative. New mills are springing up in new places and the markets are steadily widening. The downward tendency in prices is well-nigh universal, so that no pronounced injury is done. A dollar buys as much this year as last and more. Manufacturing capacity is restricted in part and there is a healthy and wise cooperation by which the channels of trade will not be gorged with unsalable products. Trade management is being centralized, but for wholesome purposes for the most part. It is being demonstrated that trade and manufacturing combinations cannot permanently crowd prices above fair limits. There seems to be exceptions to this rule, such as the French Copper Syndicate, the Sugar Trust and some lesser combinations, but the people are not through with these comparatively new forms of attack on the best interests. The expansion of industrial activity in the southern states is the historic panorama of the hour; vast sums of money are seeking employment there, and what would otherwise develop, a partial industrial depression prevents by drawing capital and labor into new and inviting fields. The iron trade is in an unsettled condition, but iron and steel buyers are profiting by it. All mill and furnace products are as cheap as they ever were in our history. Virginia and Alabama irons are displacing Pennsylvania and Ohio irons in northern markets, and the end is not in sight. The locomotive works, car works, machine, boiler and engine works and electrical establishments of the country, are all busy, many of them overcrowded with orders. The textile interests are suffering a reaction and tariff agitation is causing some unnecessary apprehension among eastern manufacturing interests. The western manufacturing establishments, and mills and shops, big and little, are fairly well employed. Each line is being fully developed, new economies are being developed, and new systems of work are finding recognition in place of older and more costly.

The business men of the nation, its workers by hand and brain, are all anxious for the early disposition of purely political issues. There is abundant and anxious capital awaiting the word of command. The present temporary dullness will work out good results. The downward tendency in prices will continue as it should until all inequalities in trade and manufacturing are removed. Speculative land values have largely disappeared, the industries have been better organized, and the country is now or by next fall will be, in a better condition than ever to enter upon the race of progress and development which the genius of the people has made possible and inevitable.

Synopsis of Building News.

Arkansas City, Ark.—The J. B. Legg Architectural Co., of St. Louis, Mo., have prepared plans for a five-story stone and granite hotel building, 80 by 100 feet; all modern improvements; cost \$115,000.

Atlanta, Ga.—Architects Bruce & Morgan report: For City of Atlanta, two-story brick and stone school building, 72 by 80 feet, slate roof; cost \$18,700; John Bishop, contractor. For Samuel W. Good, two-story frame residence, 50 by 60 feet; cost \$5,000; contracts not let.

Baucroft, Mich.—Architect Claire Allen, of Ionia, reports: For school board, two-story brick and stone school building, 47 by 57 feet; cost \$5,000; under way; William Wood, builder.

Belding, Mich.—Architect Claire Allen, of Ionia, reports: For Belding Mfg. Co., 135 Fifth avenue, Chicago, two-story brick and stone factory building, 336 by 146 feet. Three freight elevators, steam heat, galvanized iron cornices, etc.; cost \$30,000; under way; Prall & Huntley, masons; carpentry contract not let yet.

Bellaire, Ohio.—Architect E. W. Wells, of Wheeling, W. Va., reports: For First M. E. Society, church building, to cost \$9,000.

Birmingham, Ala.—Building business very quiet. Outlook for this year, very poor.

Architect Ed. Sidel reports: For Caldwell Hotel Co., six-story hotel building, 135 by 144 feet, Philadelphia pressed brick, terra-cotta, stone and iron, tin roof; cost \$30,000; under way; individual contracts. For Josiah Morris & Co., of Montgomery, five-story office building, 100 by 182 feet, pressed brick, terra-cotta and iron, asbestos roof; cost \$275,000; under way; individual contracts.

Buchanan, W. Va.—Architect E. W. Wells, of Wheeling, reports: College building, to cost \$25,000.

Cape Girardeau, Mo.—The J. B. Legg Architectural Co., of St. Louis, have prepared plans for Dr. W. B. Wilson, for a three-story brick and stone store, office and Masonic hall building, 30 by 50 feet; cost about \$15,000. Also prepared plans for a two-story brick and stone court house, 40 by 60 feet; cost \$25,000. These plans have been sent to Judge Houck, Cape Girardeau.

Chester, Ill.—Architect C. B. Clarke has prepared plans for a four-story store and opera house, to cost \$20,000; Richard Shinnick contractor.

Chicago, Ill.—While it must be admitted that the first five months of the year have not developed as great an amount of building as the more sanguine in the trades predicted, it is indeed gratifying to find, by comparison, that both in the number of permits issued and the amount of money expended in buildings up to June 1, the year 1888 not only compares favorably with other years but exceeds 1887, as shown in the following statement from the city building department: Number of permits issued January 1 to June 1, 1887, 1,527; cost of buildings, \$8,880,000. Number of permits issued from January 1 to June 1, 1888, 1,738; approximate cost, \$10,000,000. When it is taken into consideration that the bulk of this year's business is not to be shown in half a dozen large office buildings, but is made up of substantial residences in various portions of the city, and a much better class of store and flat buildings than has ever before been built, it must be acknowledged that it has, so far, been a grand year of improvement, and that an immense amount of building has been done in all portions of the city. In speaking of the outlook, our architects predict a very good fall business, and many of them show big projects not yet fully developed. It will not be at all surprising if, on January 1, 1889, we find that the year 1888, notwithstanding the usual drawbacks of "presidential years," has exceeded any previous year in the matter of money expended in building. The demand for frame houses in the suburbs is largely on the increase, and these range from \$2,000 to \$20,000 in cost. It is also noticeable that many Chicago architects are serving a very good out-of-town patronage.

Architect H. S. Jaffray reports: For E. Buckingham, Connecticut brownstone portico and steps to residence, corner Twenty-first street and Prairie avenue; cost \$3,050; Mortimer & Son, contractors. For P. Quill, three-story brick and stone flat building, 23 by 60 feet, 101 South Sangamon street; cost \$5,500; under way. For Henry Abrahams, two-story brick and stone flat building, 43 by 42 feet, on Wood street, near North avenue; cost \$5,000; under way; Conrad Kies & Son, masons; James Dohm, carpenter. For same, three-story stores and flats, 50 by 80 feet, on corner of North avenue and Wood street; St. Louis pressed brick and Michigan greenstone; cost \$13,000; under way; same contractors as on above building.

Architects Cobb & Frost have prepared plans for the Owens office building, to be erected on the southeast corner of Dearborn and Adams streets. Building to consist of cellar and basement, the floor of which is two feet below grade, to be used for offices. Above this bank floors, then eleven floors of offices, making fourteen stories in all. Basement, first and second stories granite; above this to be of special made brick and terra-cotta to match the granite; red tile roof, copper trimmings; three elevators. Main entrance, hallway and main stairs to be entirely of marble, with mosaic floor; all corridors above to be of marble and tile. Building to be constructed of steel and fire-proof material throughout; electric lights; cost about \$300,000.

Architect Clarence L. Stiles: For Davis & Rankin, six-story brick and stone warehouse, 201 by 142 feet, corner of Lake and Peoria streets; cost \$125,000. For C. Smith, block of brick and stone flats, corner of Western and Wilcox avenues; cost \$22,000. For Manual Training School, Elgin, Ill., three-story brick and stone building, 30 by 63 feet; cost \$8,000. For Mrs. Munsill, at Hartford, Conn., two-story and cellar brick and stone residence, 44 by 70 feet; cost \$30,000.

Architect John F. Warner has prepared plans for a residence for J. McDonald, 32 by 68 feet; cost \$25,000. For D. Brougham, block of stores and flats; cost \$8,000. For J. W. McFarland, residence; cost \$5,000. For Beckwith & Fleming, block of brick and stone flats, 70 by 60 feet; cost \$20,000. For A. D. Jones, store and flats, 24 by 72 feet; cost \$8,000.

Architect L. Martins has plans for J. E. Woodruff, for a three-story block of brick and stone stores and flats, 192 by 86 feet; cost \$65,000. For B. Halley, four brick and stone residences, 40 by 53 feet; cost \$20,000. For A. J. Torler, two two-story brick and stone dwellings, 44 by 55 feet; cost \$9,000.

Architect George Beaumont reports: For Jacob Mayer, two-story and basement brick and stone residence, 22 by 58 feet, at 3565 Vernon avenue; cost \$6,000; J. M. Darling, mason; F. Blair, carpenter. For Hugh Daley, two-story brick and stone flat building, 24 by 65 feet, 3014 Indiana avenue; cost \$6,000; Voght & Douglas, masons; Danly & Hass, carpenters. For C. W. Nichols, two-story attic and basement residence, 24 by 75 feet, Twenty-ninth and Prairie avenue, two fronts of granite; cost \$12,000; under way; C. Farr, contractor. For W. J. Mayer, two two-story and basement and attic brick and stone residences, 50 by 75 feet, corner of Ashland avenue and York street; cost \$30,000; letting contracts. For A. H. Lowden, three two-story and basement and attic stone front dwellings, 74 by 68 feet, Thirty-sixth street and Prairie avenue; cost \$21,000; day work.

Architect Jul de Horvath of Normal Park reports: For Ben Timmerman & Co., 600 South Morgan street, Chicago, three-story brick, stone and terra-cotta store, flat and hall building, 100 by 93 feet, corner of Seventy-ninth and Sherman streets; cost \$30,000; contract to be let June 14. For same, four-story brick and stone store and hotel building, 125 by 125 feet, corner of Sixty-third street and Stewart avenue; cost \$36,000; to be commenced about August 15. For C. S. Redfield, two-story and attic brick veneered residence, 41 by 52 feet, in Auburn Park; cost \$11,000; under way; George & Young, builders. For John M. Young, frame residence, 32 by 52 feet, at 6624 Howard street; cost \$6,000; under way; George & Young, builders. For John M. Young, frame residence, 32 by 52 feet, at 6624 Howard street; cost \$6,000; under way; George & Young, builders. For A. Berend, two-story frame flat building, 24 by 56 feet, Honore street, Englewood; cost \$3,000; under way; T. M. Mark, builder. For D. V. Bussie, two-story brick store and flat building, 25 by 60 feet; cost \$4,600; under way; D. V. Bussie, builder.

Architect C. M. Palmer has prepared plans for J. P. Dodge, three-story and basement brick and stone residence, 30 by 72 feet; cost \$20,000.

Architects Burnham & Root have prepared plans for J. J. Hoch, for a \$15,000 residence; also one for H. Pennoyer, and one for Max Meyer.

Architects Addison & Fiedler have prepared plans for the Germania Club for a four-story pressed brick and brownstone club house, 100 by 150 feet; cost \$100,000. For J. P. Bartlett, two-story brick and stone store and flat building, 31 by 96 feet; cost \$15,000.

Architects Flanders & Zimmerman have under way for D. F. Crilly, a three-story store and flat building, 210 by 75 feet; cost \$75,000.

Architect F. Foehringer has plans for Henry Rumsfeld for a five-story apartment building, 72 by 75 feet; cost \$40,000.

Architect Julius H. Huber has plans for J. Peterson for a two-story brick and stone residence, 25 by 62 feet; cost \$6,000. For the McGuire Manufacturing Company, brick factory building, 61 by 105 feet; cost \$6,000.

Architect J. Speyer has opened bids for a flat building for D. Delaney, Center avenue and Taylor street; cost \$15,000. For John McAffrey, four two-story buildings at Chicago Lawn. For M. Flanley, three-story store and office building, 50 by 100 feet, Forty-first and Halsted streets. For R. Smith, remodeling, three-story and basement building on South Desplaines street. For T. L. Kelly, three-story and basement building on corner of Fifty-seventh and Halsted streets. For Adam Fyfe, three-story store and flats on Harrison near Loomis street. For J. Sontag, two-story and basement addition to Humboldt house, Lake View. For P. White, remodeling residence on Indiana

avenue near Thirty-fourth street. For J. Healey, residence on Indiana avenue near Thirty-first street. For Lazarus Silverman, four two-story flats on Archer avenue.

Architect W. L. Carroll has plans for a four-story stone front flat building, 22 by 100 feet, for M. McKay; cost \$15,000. For L. Wickman, two two-story stone front dwellings, 32 by 65 feet; cost \$12,000.

Architect J. M. Van Osdel, Jr., reports: For the La Salle Club, a two-story and basement brick addition, 46 by 100 feet, to club house. The addition will contain bowling alley, billiard room and large assembly hall; cost \$12,000. For Joel Bigelow, two-story and basement residence, 30 by 45 feet, rock-faced Connecticut brownstone; cost \$12,000. For David Lauder, three-story and basement brick and stone store and flat building, 50 by 74 feet; also three-story and basement flat building, 23 by 65 feet; cost \$25,000.

Architects Burling & Whitehouse are preparing plans for H. N. Higinbotham for a three-story residence, 60 by 137 feet, to be built entirely of gray granite, on the corner of Michigan avenue and Twenty-ninth street, tile roof, steam heat, passenger and freight elevators, dumb waiters, conservatory, hardwood finish and tiling; cost \$125,000; stable; cost \$12,000; granite furnished by the Hallowell Granite Company; Barney & Rodatz, masons. Also letting contracts for terrace work on the Grant monument in Lincoln Park. The granite work is completed.

Architect C. A. Weary reports: For Geo. K. Owsley, two two-story brick and stone flats, 50 by 64 feet, on Robey street, near Adams; cost \$10,000; Geo. Lehman & Son, masons; C. J. Collins, carpenter.

Architect O. J. Pierce reports: For Nathan Smith, two-story cellar and attic, brick and brownstone residence, on Monroe street, near Leavitt, slate roof, hot-air heat, closets and bath, stained glass, galvanized iron cornices, hardwood finish, wood or marble mantels, etc.; cost \$8,000. For J. Abel, remodeling front and adding stone porch to residence on Vernon avenue; cost \$1,500.

Architects Wilson, Marble & Lamson report: For a syndicate, seven-story brick and stone apartment building, 58 by 170 feet, corner of Eighteenth street and Michigan avenue; the building will contain 42 flats, so planned that the suites can be made in any number of rooms, from three to nine each. It will be substantially built of St. Louis pressed brick and St. Lawrence marble, terra-cotta cornices and copper bays; wire lath ceilings and terra-cotta lumber will be used as fireproof protection; building will contain closets and baths, stained glass, skylights, three passenger elevators and a number of freight lifts, waterpower, steam heat, hardwood finish and tiling, electric bells and speaking tubes, wood and tile mantels, electric lights, iron channels, beams, etc., will be used in the construction; cost \$225,000. For Levi Cline, two three-story and basement stone front residences, 22 by 70 feet each; cost \$11,000. For same, two-story brick residence, 18 by 70 feet; cost \$7,000. For Edward Mendel and John F. Finnerty, two three-story and basement stone front residences, 21 by 70 feet each, on Grand Boulevard; cost \$11,000 each. For W. J. Moxley, five-story and basement brick and stone factory building, 40 by 100 feet, 63 and 65 West Monroe street; cost \$25,000. For George Rapp, three story and basement stone front residence, 22 by 72 feet, on Vernon avenue near Thirty-fifth street; cost \$10,500. For J. McDonald, four-story brick and terra-cotta stores and flats, 40 by 65 feet, Van Buren street and Western avenue; cost \$9,000. For Mr. Lawrence, two-story and basement brick and stone flat building, 22 feet 6 inches by 62 feet, on Belden avenue; cost \$6,000.

Architect John J. Kounh reports: For the Standard Furniture Company, six-story brick and stone store building, 50 by 125 feet, on West Madison street; also six-story brick and stone flat building, 50 by 75 feet; cost \$80,000.

Architects D. S. & A. Pentecost report: For Geo. H. Williams, two-story and attic and basement residence, 30 by 60 feet, 639 West Monroe street. To be built of Anderson special made brick, Lemont stone trimmings. Nat. Cameron, mason; C. Gareau, carpenter. For E. J. Lewis and Paul Dumond, five two-story and cellar brick and stone flats, 24 by 50 feet, corner of Erie and Leavitt streets; cost \$2,500 each. For Peter Coffey, two-story and basement brick and stone flat building, 24 by 56 feet, corner of Francisco and Jackson streets; cost \$4,700.

Architects M. F. McCarthy & Co. report: For Mr. Carleton, two-story and basement brick and stone residence on Centre avenue; cost \$7,000. For Mr. Hirsh, three-story brick and stone store and flats, 22 by 84 feet, on Noble street, Lake View; cost \$9,000. On West Lake street, three-story brick and stone store and flat building, 60 by 54 feet; cost \$18,000.

Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall:

The trade situation has not changed very much; only medium activity. The two disastrous failures in banking circles within the last year, coupled with the uneasiness among the mechanics, have had at least a temporary depressing effect. The building is confined to the erection of houses in the suburbs, large buildings in the city being few. For the month of April the following is the report of the Building Inspector:

CLASS.	NO. OF PERMITS.	VALUE.
Brick and stone.....	66	\$345,865
Wood and frame.....	83	155,365
Alterations.....	68	36,890
Moved.....	2	150
	219	\$538,270

Architect S. S. Godley has prepared plans for a two-story frame dwelling on Woodward avenue, Avondale, to cost \$5,000, for a Mr. Timberlake; finished plans for a four-story brick and stone store, 18 by 100 feet, for Morris White, to be erected on Sixth, between Vine and Walnut streets; just finished plans for rebuilding the Consolidated Tank Line Company's building at Pearl and Walnut streets. This building will have a front of four stories on Pearl street and five on Walnut; material, brick, iron and stone. He is also making sketches for other work.

Architect Enil G. Rueckert reports himself as moderately busy. He has drawn plans for the following persons: Geo. R. Tepp, a brick residence of nine rooms, hardwood finish, slate roof, with modern improvements; cost \$8,000. Henry Brehm, three and one-half stories brick apartment house of fifteen rooms, tin roof, etc.; cost \$9,000. Mrs. M. Drosch, a four story brick factory, 40 by 85 feet, with tin roof; cost \$10,000. Mr. A. Arnold, two and one-half story pressed brick addition of four rooms with tin roof; cost \$4,000.

Architect Theo. Richter, Jr., reports: For A. Fromme, a pressed brick store and dwelling at Delta Station, city, of three stories, with nine rooms, tin roof; cost \$7,500. For F. Pagels, store and flat building, stone front, five stories high, twenty rooms, with a tin roof and slate mansard; cost \$15,000.

Architect Geo. W. Rapp leaves in June for an European trip for pleasure, study and health, and expects to be absent about fifteen months. While away he expects to visit the Nile, climb the pyramids, bring back a crocodile or two, and return with his head full of new architectural ideas. John H. Boll, for years his head draftsman, and an able one, too, succeeds to his business. Mr. Boll is a painstaking, capable architect, and although young in years, is old in experience. I know that THE INLAND ARCHITECT will join us in the best wishes for his success, as we wish "George" *un bon voyage*.

Architect Thornton Fitzhugh reports: Making plans for a two-story brick dwelling to be erected on Walnut Hills for Charles Hanks; to cost \$8,000; material stock, brick, slate roof and hardwood finish. He is also at work on plans for other buildings.

Architect W. Stanton Robinson reports: Two-and-a-half-story frame dwelling for Jacob Pawalowski, to be located in Ivanhoe; cost \$2,500; brick store and dwelling for Edward Lehy, to be erected in Cumminsville; cost \$10,500. He recently let contracts for the following buildings: Frame cottage on Price Hill; cost \$1,200; two-and-a-half story frame dwelling on Mt. Hope Road, for M. Z. Kerwick; cost \$2,500; two-and-a-half-story shingle dwelling for H. Rulison, Ivanhoe; cost \$2,500, and F. D. Lawrence, two-story frame dwelling; cost \$2,000.

Architects Buddemeyer & Plympton report the following work: Half timber dwelling for T. B. Stone, Avondale, nine rooms and all modern conveniences; Grand Stand for Carthage Fair Grounds, timber, iron columns and standing tin seam roof; cost \$10,000; nine-room dwelling for G. Honshell, Queen Anne style, brick and plaster to be erected in Avondale; eight-room dwelling for E. R. Hall, Bond Hill, Ohio, shingles and plaster gables; residence for James V. Sweetser, thirteen rooms, half timber and shingles, to be erected at Marion, Ind.; cost \$8,000; bank building, pressed brick and Bedford limestone trimmings, to be erected at Charleston, W. Va.; cost \$50,000; also two frame dwellings for O. E. Miller, city, to contain six rooms each, with bath.

Architect Wm. Martin Aiken has prepared plans for the following persons: Judge Wm. Worthington, brick residence of fifteen rooms, trimmed with kiln-brick stone and slate roof. It is Romanesque in detail, although not much of an attempt has been made to elaborate. One of the features is the octagonal hall in center of house; cost \$14,000. A. H. Chatfield, Jr. A block of eight stores three stories high; first story brick, balance half timber work and a driveway in middle of block, by which the rear is reached for shipping purposes. The flats will be very complete, and the frame work will be treated with auto-pyre; cost of block \$25,000.

Cleveland, Ohio.—At present the outlook is very encouraging, and some of the architects prophesy that Cleveland will ere long be one of the first in the building procession of the country.

Architects Cramer & Fugman report: For G. E. Home, of Boston, four-story brick and brownstone store, apartment and hall building, 75 by 80 feet; cost \$16,000; under way; H. Lindhorst, bu lder. For A. H. May, three-story brick store building, 40 by 87 feet; cost \$6,500; taking figures. For D. L. Diemer, frame cottage; cost \$3,000. For Walker & Rogge, three-story brick and stone store building, 40 by 100 feet; cost \$10,000; under way; H. Lindhorst, builder. For H. Machke, frame store building, 30 by 72 feet; cost \$4,000; under way; C. F. Crouse, builder. For L. W. Heimsath, cottage; cost \$3,800; under way; B. Cromell, builder. For Wm. Trinkner, three-story brick store building, 40 by 80 feet; cost \$5,800; under way; John Fuelling, builder. For Mrs. Rier, double frame dwelling; cost \$3,500; taking figures. For First Baptist Society, stone church, 82 by 130 feet; cost \$100,000; J. R. Thomas, architect, New York; Cramer & Fugman, superintendents; D. & G. Griesse, builders.

Architects Lehman & Schmitt report: For Dr. A. Hahn, dwelling; cost \$3,500; under way. For A. Bandlow, dwelling; cost \$3,500. For Peter Flath, double dwelling; cost \$6,000. For W. E. Jones, double dwelling; cost \$2,500; under way.

Colorado Springs, Col.—Outlook fair, no "boom," but steadily moving business.

Architect Frank T. Lent reports: For W. H. Sanford, two-story and attic frame residence, 38 by 66 feet; cost \$12,000; under way; Joseph Dozier, builder. For John De Witt Peltz, two-story and attic frame residence, 36 by 70 feet; cost \$12,500; under way; Lewis Whipple, builder. For Colorado City, two and one-half story brick and stone school building, 66 by 70 feet; cost \$20,000; receiving bids.

Council Grove, Kan.—Outlook not flattering.

Architect J. H. Leedy reports: For Dr. H. Painter, two-story rame house, 25 by 32 feet; cost \$4,000; plans prepared. For W. F. Waller, two-story frame house, 32 by 36 feet; cost \$3,000; plans prepared. For Henry Weigam, two-story and basement frame house, 25 by 32 feet; cost \$3,500; Joseph Axe, builder.

Creston, Iowa.—Architect W. F. Hackney, of Kansas City, Mo., reports: For Board of Education, two-story brick school building, 60 by 80 feet; cost \$20,000; projected.

Dallas, Tex.—The J. B. Legg Architectural Co., of St. Louis, Mo., have prepared plans for a six-story bank building, 50 by 85 feet; granite and pressed and molded brick with terra-cotta and copper trimmings; all modern improvements; cost \$50,000.

Denver, Col.—Present condition and outlook very good, but has been somewhat dull for the past few weeks on account of the scarcity of brick. Indications point to great activity this coming summer.

Architects Balcomb & Rice report: For H. J. Stephens, two and one half-story brick and stone residence, 37 by 60 feet; cost \$9,000; under way; Hood & Stem, builders. For A. B. Ingols, two and one-half story brick and stone residence, 37 by 50 feet; cost \$6,500; under way; J. C. Wheeler & Co., builders. For Conrad Frick, two and one-half story brick and stone residence, 36 by 54 feet; cost \$8,500; under way; J. S. Buell, builder. For Mrs. A. E. Epley, two and one-half story brick and stone residence, 34 by 65 feet; cost \$8,000; under way: day work. For Wm. C. Miller, one-story and attic brick and stone cottage, 38 by 48 feet; cost \$7,000; projected. For C. D. Gurley, two-story brick and stone cottage, 35 by 45 feet, slate roof; cost \$6,500; projected. For W. G. Nevin, two-story brick and stone cottage, 32 by 48 feet; cost \$5,500; under way; Frank Bayer, builder. For W. H. Mayes, two-story brick and stone dwellings, 75 by 125 feet; cost \$23,500; projected. For McCandless & Robinson, three-story brick and stone hotel building, 75 by 140 feet; cost \$30,000; projected. For L. Levy, two-story brick stores and flats, 40 by 62 feet; cost \$6,500; projected. For D. S. Selover, one-story brick and stone cottage, 33 by 50 feet; cost \$4,200; under way; J. Holland, builder. For Geo. H. Higgins, one and one-half story brick and stone cottage, 30 by 45 feet; cost \$3,300; under way; Hood & Stem, builders. For T. S. Nettleton, two-story brick and stone double residence, 42 by 51 feet; cost \$7,500; projected. For Oliver O. App, two-story brick and stone double residence, 34 by 45 feet; cost \$4,000; projected. For Charles Boulter, two-story brick and stone cottage, 28 by 45 feet; cost \$3,500; projected. Also four brick and stone cottages for different parties, costing from \$3,400 to \$3,600.

Detroit, Mich.—The state of building seems unchanged from last month. There is a dullness in the offices as to new work.

Architects Rogers & McFarlane report: For Naomi Brown, two-story brick and stone dwelling, 40 by 60 feet, slate roof; cost \$16,000; Topping & Fisher, builders.

Architects M. L. Smith & Son report: For Mrs. Stevens, five-story brick and stone store building, 40 by 60 feet; cost \$40,000; Topping & Fisher, builders.

Architects Scott & Co. report: For E. C. Van Husen, two-story brick and stone dwelling, 24 by 50 feet, slate roof; cost \$3,500; M. Blay & Son, builders. For C. F. Purdie, two-story brick and stone dwelling, 28 by 45 feet, slate roof; cost \$4,000; Henry Carew, builder. Two-story brick and stone dwelling, 25 by 60 feet, slate roof; cost \$6,000; Henry Chandler, builder.

Architect Levi Coquard reports: For St. Joachim's Parish, three-story brick and stone school building, 40 by 40 feet, slate roof; cost \$20,000; M. Blay & Son, builders.

Architects A. C. Varney & Co. report: For Henry Wetsel, two-story brick and stone dwelling, 40 by 63 feet, slate roof; cost \$8,000; F. Schreiber, builder. For Mrs. Cooley, two-story brick and stone dwelling, 25 by 62 feet; cost \$12,000; J. Waterfall & Son, builders. For Fred Moran, two-story brick and stone dwelling, 53 by 53 feet; cost \$5,200.

Architect J. V. Gearing reports: For N. G. Williams, two-story brick and stone dwelling, 56 by 60 feet, slate roof; cost \$15,000; A. Chaption, Jr., builder.

Architect J. V. Smith reports: Two-story brick and stone double dwelling, 45 by 65 feet; cost \$10,000; James Deitz, builder.

Architects Meyers & Son report: For Mrs. Lowe, two-story frame dwelling, 30 by 55 feet; cost \$3,900; Peter Henderson, builder.

Architect Gordon W. Lloyd reports: For M. L. Smith, three three-story brick and stone dwellings, 41 by 60 feet; cost \$11,000; A. Chaption, builder. For W. A. King, two-story brick and stone dwelling, 32 by 56 feet, slate roof; cost \$6,400; James Buchanan, builder.

Architect W. G. Malcomson reports: For George Geagan, two-story frame dwelling, 24 by 60 feet; cost \$2,000. For James Powell, two-story frame dwelling, 28 by 67 feet; cost \$3,000; Thomas Moore, builder.

Architect A. E. French reports: For Paul Rabout, two-story brick and stone dwelling, 24 by 58 feet; cost \$3,000; Allen Holmes builder.

Architect Joseph E. Mills reports: For J. H. Johnson, two-story frame dwelling, 25 by 46 feet; cost \$2,500.

Architects Mason & Rice report: For Patrick Dee, three-story brick and stone dwelling, 22 by 66 feet; cost \$5,000.

Architect W. E. Brown reports: For Blake & Son, three-story brick and stone dwelling, 23 by 94 feet; cost \$5,000; Mr. Prolo, builder.

Architects Donaldson & Meier report: For the City Park Commissioners, one-story frame boat house, 30 by 250 feet; cost \$4,350; Teakle & Golden, builders.

Architect E. W. Arnold reports: For G. W. Johnson, two-story frame dwelling, 25 by 43 feet; cost \$2,000.

Architect A. B. Cram reports: For St. John's Parish, two-story brick and stone parish building, 54 by 110 feet; cost \$25,000; P. Dee and Spitzner Bros., contractors.

B. Shield is building for C. W. Hausher, a two-story brick and stone store and barn, 22 by 70 feet; cost \$4,500.

Goff Stenton is building a two-story brick and stone double dwelling, 36 by 60 feet; cost \$5,000.

Morse, King & Co., are building for M. H. Melvin, a two-story brick and stone store and dwelling, 40 by 68 feet; cost \$5,000.

The Huyett & Smith Mfg. Co., are building a three-story brick machine shop, 75 by 45 feet; cost \$4,000.

H. W. Holcomb is building for himself two two-story brick and stone dwellings, 27 by 45 feet; cost \$8,500. Also a two-story brick and stone dwelling, 27 by 45 feet; cost \$5,500.

Messrs. Green & Golder are building a two-story brick and stone double dwelling, 47 by 62 feet; cost \$4,500.

Harry Chandler is building for C. E. Bresler a block of six two-story brick and stone stores, 116 by 58 feet; cost \$14,000.

T. Fairbairn is building for W. P. Kingsley, a two-story brick and stone foundry, 60 by 120 feet; cost \$5,000.

Permits were granted during the month of May for 246 new buildings, to cost \$426,645. For 78 alterations, etc; cost \$51,263. Total; 324 permits; cost \$477,908.

Douglas, Ont.—Architect James R. Bowes, of Ottawa, reports: For Rev. Mr. Merion, stone church, 48 by 80 feet; cost \$10,500; under way; day work.

Des Moines, Iowa.—Architect Clint Nourse has completed sketches for the proposed combination building for the Y. M. C. A., Chamber of Commerce, and City Library.

Dubuque, Iowa.—Architect F. D. Hyde reports: For W. S. Bradley, three-story brick and terra-cotta store and flat building, 53 by 53 feet; cost \$11,000; under way. For Charles Eigheny, remodeling residence; cost \$3,500; under way. For J. H. Tice, remodeling residence; cost \$2,500; under way.

Evanston, Ill.—Architect S. A. Jennings reports: For Timothy Dwight, two frame dwellings, finished in Georgia pine, furnace and mantels; cost \$3,500 and \$4,000. For Gen. White, two frame dwellings; cost \$3,600, and \$4,200. For P. R. Woodford, frame dwelling; cost \$3,500. For J. Hebblethwaite, frame dwelling; cost \$3,500. For Dr. Duyche, pressed brick veneered residence, all modern improvements; cost \$10,000. For Mr. Childs, brick veneered residence; cost \$4,000.

Forth Smith, Ark.—General outlook not as good as it was early in the season.

Architects Lee & Roth report: For W. Jacobs, two-story brick and stone store and office building, 30 by 50 feet; cost \$4,500; under way; W. S. Bogue, builder. For Chas. Burns, two-story brick and stone store building, 50 by 100 feet; cost \$7,100; W. S. Bogue, builder. For R. Bollinger, two-story brick and stone office building, 37 by 90 feet; cost \$8,000; contract not let. For New Hope Seminary, Choctaw Nation, additional two-story frame building, 34 by 84 feet, living apartments; cost \$5,000; under way; Julius Pmfrt, builder.

Fort Worth, Tex.—The outlook for the building trades in southwest Texas has never been so good as at present. Everything seems to indicate that a large amount of building will be done this season.

Architect J. J. Kane reports: For W. W. Dunn, four-story brick, stone and iron building, 85 by 40 feet; cost \$18,000; under way; Heck & Baker, builders. For J. M. Pears, three-story brick, stone and iron building, 50 by 90 feet; cost \$16,225; under way; Tomlinson, contractor. For H. M. Williams, four-story brick, stone and iron building, 50 by 90 feet; receiving bids. For city of Fort Worth, two-story brick, stone and iron building, 25 by 90 feet; cost \$8,000; under way; Townsend & Lusher, builders. For Catholic Society, stone church building, 76 by 136 feet, slate roof; cost \$75,000; under way; sub contracted. For R. E. Maddox, three-story brick, stone and iron building, 75 by 200 feet; cost \$26,000; under way; Heck & Baker, contractors. For Dr. Beall, two-story frame residence, 42 by 76 feet; cost \$8,000; under way; Wm. L. Rail, builder. For R. E. Maddox, three-story brick, stone and iron building, 50 by 90 feet; cost \$14,000; under way; Heck & Baker, contractors. For Hyde Jennings, three-story brick, stone and iron building, 25 by 90 feet; cost \$9,000; under way; Townsend & Lusher, builders.

Joliet, Ill.—Present outlook good.

Architect Julian Barnes reports: For George H. Munroe, three-story and basement stone store and office building, 44 by 120 feet; cost \$20,000; foundations in. For George Abbott and Joseph Reichmann, three-story and basement pressed brick store and office building, 44 by 80 feet; cost \$15,000; contracts let. For John Gray, two-story brick store and tenement, 46 by 60 feet; cost \$4,200; under way. For F. Bestwick, two-story and basement stone store and tenement, 44 by 66 feet; cost \$4,800; excavating done. For John Anderson and H. Odenthal, two-story and basement brick and stone store and tenement, 66 by 68 feet; cost \$9,000; excavating done. For Otis Hardy, two two-story frame residences, 35 by 55 feet; cost \$12,000; under roof. For Sanger Steil, two-story frame residence, 34 by 54 feet; cost \$6,000; under roof. For S. S. Tyler, two-story frame residence, 34 by 54 feet; cost \$5,500; under roof. For George Munroe, two-story pressed brick residence, 38 by 51 feet; cost \$6,000. For Joseph Keip, two-story frame residence, 30 by 48 feet; cost \$4,000. For Young Men's Christian Association, three-story and basement stone building, 65 by 120 feet; projected. Other work in Joliet amounting to about \$14,000. For Snap Bros., Normal Park, nine houses; cost \$30,000. For Louis M. Arnold, Peotona, two-story and basement frame residence, 33 by 48 feet; cost \$4,500.

Jonesboro, Ark.—The J. B. Legg Architectural Co., of St. Louis, Mo., have prepared plans for S. A. Warner, for a two-story brick and stone residence, 50 by 70 feet, slate roof; all modern improvements; cost \$10,000.

Kansas City, Mo.—Architect W. F. Hackney reports: We have no "boom," but a steady increase in building. Permits issued since January 1 amount to over \$3,000,000. This does not include building in the suburbs. For James T. Thornton, two-story brick and terra-cotta residence, 52 by 80 feet; cost \$30,000; under way; Wm. Harmon, builder. For F. M. Hayward, frame dwelling, 37 by 42 feet; cost \$3,000; under way; H. H. Bilton, builder. For Mrs. Stella Bellows, frame dwelling, 37 by 38 feet; cost \$2,500. For W. F. Hackney, brick and frame residence, 38 by 47 feet; cost \$4,500; under way; H. H. Bilton, builder. For John E. Wagner, three-story brick tenement block, 52 by 130 feet; cost \$40,000; under way; W. B. Miller, builder. For S. C. Drollinger, three-story brick tenement block, 53 by 134 feet; cost \$42,000; under way; T. O. C. mbs, builder. For I. W. Boutrager, double tenement block, 38 by 130 and 38 by 134 feet; cost \$70,000; projected. For Herman Long, four-story "French Flat" building, 96 by 92 feet; cost \$75,000; projected. For James T. Thornton, one-story brick store, 25 by 120 feet; cost \$3,000; projected.

Architect B. H. Brooks reports: For L. G. A. Copley, three-story brick and stone double dwelling, 45 by 58 feet; cost \$15,000; under way; superstructure not let. For W. J. Anderson, two-story brick and terra-cotta double dwelling, 44 by 60 feet; cost \$18,000; under way; A. Dymock, builder. For J. E. Elmore, two-story brick and stone dwelling, 45 by 60 feet; cost \$12,000; under way; R. W. Vaughan, builder. For Melrose M. E. Society, brick and stone church, 48 by 78 feet; cost \$20,000; foundation under way; superstructure not let. For Immanuel Baptist Society, brick and stone church, 58 by 60 feet; cost \$10,000; under way; Wm. Main, builder.

Architect James Oliver Hogg reports: For W. S. Beard, three-story pressed brick office building at Wyandotte; cost \$10,000. For Geo. Hoffman, two-story stone and frame residence; cost \$6,000. For Henry M. Beardsley, two-story residence; cost \$4,000. For school board at Salisbury, Missouri, brick and stone school building; cost \$15,000.

Architect F. J. Hart reports: For M. Brogell, three brick and cutstone residences; cost \$20,000. For James Goodwin, twelve small brick stores; cost \$10,000. For Clark Smith, brick tenement building; cost \$12,500. For M. Warren, two-story residence; cost \$7,000. For James G. Place, eight brick and stone tenement houses; cost \$12,000.

Architects Knox & Guinotte report: For Patrick Soden, remodeling residence; cost \$10,000. For J. K. Guinotte, brick and stone residence; cost \$10,000. For C. J. Cowherd, brick and stone residence; cost \$10,000. For Paul Jenkins, brick and stone office building, 50 by 115 feet; cost \$40,000. For R. C. Hunt, brick and stone residence; cost \$10,000. For J. J. Woodworth, four-story and basement brick and terra-cotta store building; cost \$50,000. For J. K. Stark, double brick and stone dwelling; cost \$15,000. For E. W. Dowden, four two-story brick and stone stores; cost \$15,000. For Peter Soden, brick and stone residence; cost \$15,000. For Commercial Bank, three-story brownstone building; cost \$15,000.

Among the building permits recently issued are the following, which contemplate an expenditure of \$5,000 or more: B. A. Wilson, excavation for block of ten houses, 230 by 40 feet; cost \$5,000. C. A. Wilson, excavation for block of ten houses; cost \$5,000. J. P. Jackson, two-story brick residence, 44 by 76 feet; cost \$35,000. Emma W. Moulton, two three-story brick residences, 47 by 75 feet; cost \$12,500. James Cotter, three-story business block, 25 by 50 feet; cost \$9,000. G. A. Hefflin, two frame dwellings, 27 by 44 feet; cost \$7,000. S. C. Drollinger, block of six two and three-story business buildings, 132 by 43 feet; cost \$30,000. W. H. Bartlett, two three-story brick residences, 44 by 70 feet; cost \$18,000. Stumpf & Peltzer, block of four brick residences, 84 by 108 feet; cost \$12,000. A. J. Hedrick, block of four two-story frame dwellings, 24 by 43 feet each; cost \$8,000. Smith & Cauch, block of four three-story brick residences, 142 by 32 feet; cost \$24,000. W. C. Scarritt, two-story stone residence, 51 by 64 feet; cost \$30,000. Long Bros., four-story brick and stone business building, 135 by 86 feet; cost \$100,000. Commercial Bank, three-story brick building, 25 by 74 feet; cost \$16,000. George Joffe, two story brick business block, 65 by 35 feet; cost \$18,000. S. C. Douglass, two-story brick residence, 55 by 70 feet; cost \$35,000. Ridge & Denny, five-story brick business building, 142 by 50 feet; cost \$70,000. J. F. Marks, two two-story brick residences, 30 by 51 feet; cost \$10,000. Ira J. Woodworth, two-story brick business building, 60 by 120 feet; cost \$18,000. F. P. Wilson, two brick residences; cost \$5,000. Mrs. Ella Adams, two brick residences, 42 by 57 feet; cost \$15,000. W. D. Godkins, three-story brick building, 56 by 43 feet; cost \$10,000. Independence avenue Methodist Church, two-story building; cost \$9,000.

The Cotter & Dugan building is to be pushed rapidly. It will be a six-story building, built of brownstone and pressed brick, having a frontage of 125 feet on Main street, between Twelfth and Thirteenth; cost \$100,000.

Knoxville, Tenn.—Buildings small and operations rather slow this season.

Architects Baumann Bros. report: For F. H. McClung, two-story frame residence, 45 by 60 feet, slate roof; cost \$9,000; under way; James A. Galyon, builder. For R. A. Arthur, two-story brick store and flats, 48 by 100 feet; cost \$8,000; making plans. For Joseph Schneider, two-story brick stores and flats, 50 by 60 feet; cost \$7,000; making plans. For J. F. Haupt, two-story brick stores and flats, 42 by 60 feet; cost \$7,500; under way; James A. Galyon, builder. For Dr. S. B. Boyd, three-story brick stores and flats, 40 by 43 feet; cost \$6,500; under way; James A. Galyon, builder. For P. N. Hewen, two-story frame dwelling, 42 by 65 feet; cost \$4,000; under way; McLemore & Chenoweth, builders. For N. S. Woodward, two-story frame dwelling, 48 by 60 feet; cost \$6,000; making plans. For Thos. J. Peed, two-story frame dwelling, 35 by 57 feet; cost \$4,000; making plans. For Jos. Knaffel, two-story brick dwelling, 28 by 60 feet, slate roof; cost \$6,000; making plans. For E. E. McMillan, two-story frame dwelling, 38 by 67 feet; slate roof; cost \$7,000; under way; Cooley Bros., builders. For W. B. Lockett, three-story brick store building, 26 by 141 feet; cost \$9,000; under way; W. H. Dawn, builder. Also a number of less important dwellings projected and under way.

Lawrence, Kan.—Architect John Wees, of St. Louis, Mo., has prepared plans for E. F. Pierson for a two-story brick, stone and frame residence, 35 by 55 feet; cost \$5,500.

Leavenworth, Kan.—Architect E. T. Carr has prepared plans for a \$12,000 library building to be erected for the Soldiers' Home.

Marietta, Ga.—Architects Bruce & Morgan, of Atlanta: For H. L. Welch, two-story frame residence, 50 by 74 feet; all modern improvements; cost \$5,000; contracts not let.

Medicine Lodge, Kan.—Architect C. W. Terry, of Wichita, reports: For the School Board, two story and basement brick and stone schoolhouse, 64 by 86 feet; cost \$16,000; contract not let.

Memphis, Tenn.—Present condition not good; outlook not favorable. No large buildings going up, and none projected that are known of.

Architects Martin & Chamberlin report: For Medical College, two-story brick building, 50 by 90 feet; cost \$15,000; contracts let June 10. School building, two-story brick, 40 by 62 feet; cost \$15,000; contracts let June 1. For W. L. Parker, two-story frame dwelling, 25 by 60 feet; cost \$3,500; W. H. Walker, builder. For J. M. Brinkley, two-story frame dwelling, 30 by 60 feet; cost \$3,000. For Mr. Everman, two-story brick addition; cost \$3,750. For Idlewild Land Company, fifty frame dwellings; cost \$150,000; contracts to be let July 1.

Milwaukee, Wis.—Architects Leopold & Lesser report: For Mrs. M. A. Owen, two-story brick veneer dwelling, 30 by 65 feet; cost \$8,500; H. Filter & Co., builders. For Adam Pleirs, two-story brick veneered store and dwelling, 25 by 60 feet; cost \$4,500. For Ulrich Deruehl, two-story frame dwelling, 26 by 50 feet; cost \$4,000. For Frank Mueller, two-story and basement frame and stone building, 28 by 60 feet; cost \$4,000. For August Schmidt, two-story brick store building, 25 by 70 feet; cost \$6,000. For Mrs. Eliza Patten, two-story frame building in Lake City, Minn.; cost \$4,500. For the Milwaukee Casket Co., four-story frame and iron factory building, 60 by 60 feet; cost \$5,000. For Geo. Weinagler, two-story brick veneered building, 34 by 68 feet; cost \$6,000. For Wm. Millard, three-story brick store building, 25 by 68 feet; cost \$7,500. For G. B. Van Pelt, two-story frame building, 38 by 60 feet; cost \$8,000. For August Pritzlaff, two-story frame building, 26 by 50 feet; cost \$4,000. For Chas. L. Schan, brick veneered store building, 28 by 65 feet; cost \$4,800. For Anton Ledigo, brick store and flat building, 28 by 78 feet; cost \$8,500. For Toepefer & Sons, brick warehouse, 48 by 68 feet; cost \$5,000. Also a number of buildings, costing less than \$4,000 each.

Minneapolis, Minn.—Architects Orff Bros. report: For C. Noch, three-story brick business building; cost \$10,000.

Architect C. C. Yost reports: For Col. Lowry and others, frame opera house and pleasure garden, at Lake Harriett; main building, 325 by 80 feet, seating capacity of opera house 1,500; cost \$50,000.

Architect Harry W. Jones reports: For National Bank of Commerce, eight-story brick and stone bank building; cost \$200,000.

New Castle, Pa.—Architect S. W. Foulk reports: For Pearson Bros., three-story brick, stone and terra-cotta store and office building, 42 by 85 feet; slate roof, steam heat; cost \$18,000.

New Corporations.—The Champion Fire Proofing and Insulating Company, Chicago, Ill., capital stock \$150,000; to manufacture insulating materials; incorporators, B. F. Voute, J. F. Marshall and S. Schupp. The Carnegie Iron Mining & Manufacturing Company, of Chicago; capital, \$300,000; to develop certain iron and coal mines in the State of Georgia, and to manufacture and deal in iron and lumber for building purposes; incorporators, C. J. Becker, W. Yager, D. T. Bagley and I. Ackerman.

Newton, Kan.—Architect W. F. Hackney, of Kansas City, Mo., reports: For Board of Education, two-story brick school building, 75 by 112 feet; cost \$28,600; Gordon & Parks, contractors. For same, two-story brick school building, 66 by 126 feet; cost \$26,900; Gordon & Parks, contractors.

Newton, Ont.—Architect James R. Bowes, of Ottawa, reports: For Rev. I. Leahy, stone church, 40 by 90 feet; cost \$12,000; under way; day work.

Omaha, Neb.—Architects Mendelsohn, Fisher & Lawrie report: For Mrs. J. B. Graft, two-story frame cottage, Kountze Place, Omaha; cost \$3,000. For Danish Association, four-story and basement brick store and society building; cost \$50,000. For J. F. Sheely, five-story and basement brick office and store building; cost \$100,000. For American City Water Works Company, a four-story stone pumping station at Florence, Neb.; cost \$100,000. For S. L. Wiley, Omaha, two-story stone, brick and frame residence at Walnut Hill; cost \$25,000. For Trinity M. E. Church Society, Omaha, frame church, Kountze Place; cost \$18,000. For Third Congregational Church Society, Omaha, brick church at Kountze Place; cost \$15,000. For Mead State Bank, York, Neb., two-story and basement stone bank building at York, Neb.; cost \$12,000. For J. H. Jerome, York, Neb., two-story stone store building; cost \$12,000. For Dr. McCrea, two-story frame residence, Kountze Place, Omaha; cost \$4,000. For Ole Oleson, two-story brick residence, Kountze Place, Omaha; cost \$15,000. For Omaha National Bank, addition and alterations to five-story brick bank building; cost \$40,000. For S. Reichenberg, two-story frame residence, South Eighteenth street, Omaha; cost \$4,000. For W. T. Reaser, Fairmount, Neb., two-story brick store and flat building; cost \$18,000. For Episcopal Society of Beatrice, Neb., stone church edifice, to cost \$30,000. For University of Nebraska, Grant Memorial Hall (armory) at Lincoln, Neb., to cost \$30,000. For Knights of Pythias, Omaha, five-story stone Castle Hall and office building; cost \$100,000. For John Withnell, Omaha, two-story frame residence, West Farnam street; cost \$12,000. For Max Meyer, Omaha, two-story frame residence, Twenty-fourth and Harney streets; cost \$15,000. For Max Meyer, Omaha, two-story frame stable, Twenty-fourth and Harney streets; cost \$3,000. For F. V. Wasserman, two-story frame residence, Thirty-sixth and Burt streets, Omaha; cost \$6,500. For J. C. Watson, Nebraska city, Neb., frame cottage; cost \$2,000. For Mrs. Kate Webster, Chicago, Ill., three-story brick residence at Chicago; cost \$5,000. For Hon. A. S. Padlock, Beatrice, Neb., three-story hotel and opera house; cost \$125,000. For Sisters of Convent of Mercy, Omaha, three-story brick convent building; cost \$75,000. For R. Stevens & Son, Omaha, two-story frame residence; cost \$6,000; for R. Stevens & Son, two-story frame residence; cost \$4,500. For Lew Hill, Omaha, two-story brick addition to store building, Fifteenth and Douglass streets; cost \$10,000. For Young Men's Christian Association, four-story stone building; cost \$90,000. For Z. B. Berlin, frame residence, Kountze Place, Omaha; cost \$4,500. For Erastus A. Benson, frame residence, Benson Place, Omaha; cost \$12,000. For Dr. V. H. Coffman, three two-story brick houses, Jackson street, Omaha; cost \$18,000. For Gen. J. C. Cowin, two-story brick stable, South Tenth street, Omaha; cost \$3,500. For J. H. Evans, two-story brick stable, South Eighteenth street, Omaha; cost \$10,000. For Geo. L. Fisher, two-story frame residence, Kountze Place, Omaha; cost \$5,500. For John Grant, two-story frame residence, Park avenue, Omaha; cost \$6,000. For Messrs. Hull & Sherman, frame residence, Kountze Place, Omaha; cost \$3,500. For Farmers and Merchants' Bank, Red Cloud, Neb., two-story and basement store and brick bank building; cost \$16,000. For Dr. Fred Swartzlander, six three-story brick flats, Twenty-sixth and Capitol avenue, Omaha; cost \$40,000. For Albert Swartzlander, two-story frame residence, Twenty-second and Webster streets, Omaha; cost \$5,000. For E. L. Stone, two-story frame residence, Thirty-second and Farnam streets, Omaha; cost \$18,000. For H. B. St. John, two-story frame residence, Kountze Place, Omaha; cost \$4,500. For T. Snihol, two-story frame stores and flats, Omaha; cost \$6,000. For G. W. Smith, four-story and basement, stone store building, South Sixteenth street, Omaha; cost \$50,000. For Henry Hornberger, three-story brick addition to store building, Douglass street, Omaha;

(Continued on page XIV.)

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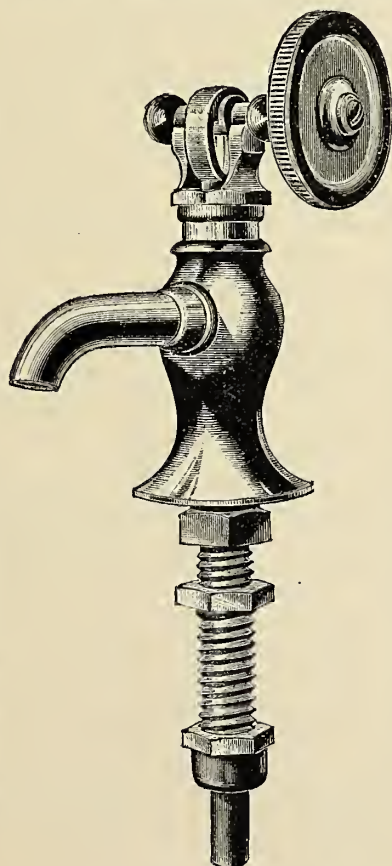
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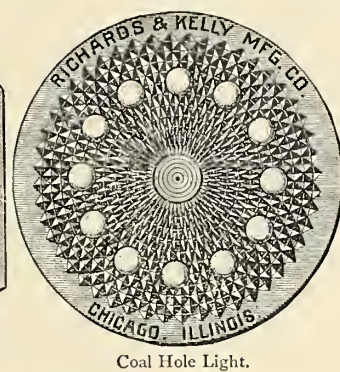
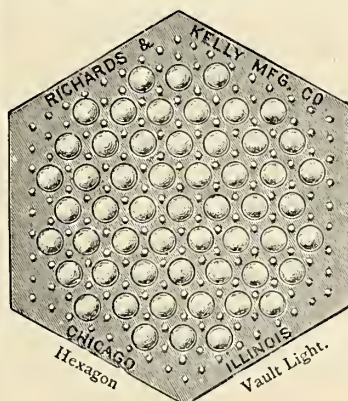
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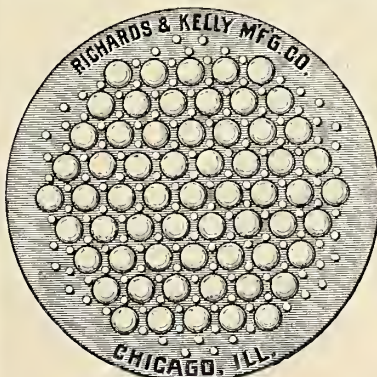
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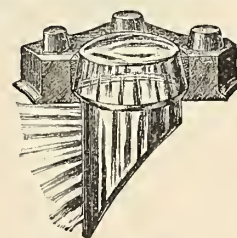
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(Continued from page 82.)

cost \$5,000. For J. W. Hayes, two-story frame residence, Sherman avenue, Omaha; cost \$3,000. For Fred Kuehn, two-story frame residence, South Nineteenth street, Omaha; cost \$3,500. For Omaha Board of Education, two-story brick schoolhouse (sixteen rooms) for Lake and Nineteenth street, Omaha; cost \$45,000. Two-story brick schoolhouse (sixteen rooms) for Twenty-fifth street and Mason, Omaha; cost \$45,000. For Louis Mendelssohn, two-story frame residence, Kountze Place, Omaha; cost \$5,500. For H. H. Meday, two-story frame residence, Park avenue, Omaha; cost \$7,000. For Kirkendall, Jones & Co., a five-story and basement stone office building, Sixteenth and Dodge streets, Omaha; cost \$38,000. For M. Hellman, a three-story and basement brick machine shop, Fifteenth and Jackson streets, Omaha; cost \$16,000. For John Hochstrasser, a three-story and cellar brick store and flat building, corner Fourteenth and Jackson streets, Omaha; cost \$24,000. For Union Stock Yards Company (limited), a three-story basement and attic brick hotel building at South Omaha; cost \$35,000. For Aaron Cahn, a three-story brick store and flat building, corner Fourteenth and Dodge streets, Omaha; cost \$26,000. For A. C. Powell, a three-story brick store and flat building, South Sixteenth street, Omaha; cost \$15,000. For Pickering Memorial M. E. Church Society, Omaha, stone church, Nineteenth and Davenport streets; cost \$100,000. For Omaha Charities, two-story and basement frame *crèche*, Nineteenth and Harney streets.

Ottawa, Ont.—The present season has been the most active for some years. Over one-half million will be expended in building. Plenty of employment for all kinds of mechanics.

Architect James R. Bowes reports: For A. Heney, brick tenement building, 50 by 54 feet, slate roof; cost \$7,000; McKennon & Richards, builders. For J. Kidd, three house brick veneer terrace, 55 by 40 feet; cost \$6,000; under way; Shore & Ash, builders. For Cottage Building Association, eight brick veneer cottages, 22 by 38 feet each; cost \$24,000; under way; A. Grant and A. Garoock, builders. For John Armstrong, brick veneered dwelling, 22 by 36 feet; cost \$4,000; A. Grant and A. Garoock, builders. For Roman Catholic School Board, four brick school houses, 52 by 40 feet; cost \$25,000; under way; John S. Lyons, builder. For H. D. Harris, brick residence, 43 by 45 feet; cost \$9,500; under way; F. McCullough, builder. For Congregational Society, brick and stone church, 62 by 63 feet; cost \$10,000; under way; Robertson & Stockland, builders. For Archbishop Duhamel, stone church, 62 by 150 feet; cost \$70,000; taking figures.

Ottumwa, Iowa.—Architect Edward Clark reports: Prospects are brighter than for past fourteen months; have three frame buildings on hand; cost \$3,500, \$2,800 and \$1,800 respectively; also making preliminary sketches for several parties.

Owen Sound, Ont.—Present condition of building operations fair; work holding back for want of brick; considerable work of no great size projected and probability of larger work later on if the new \$1,500,000 elevator goes on for the C. R. R.; wages good.

Architect J. C. Foster reports: For W. F. Wolfe, two-story brick residence, 44 by 55 feet; cost \$5,000; projected. For School Board, two-story brick school building, 48 by 61 feet; cost \$5,800; projected. For Mrs. McMillan, block of six two-story brick stores, 48 by 102 feet, iron roof; cost \$7,500; D. Brown, carpenter; R. Malcom, mason. For Thomas Grimes, three-story brick hotel building, 36 by 96 feet; hot air heat; cost \$7,750; under way; I. C. Brown, carpenter. Disciples church, blue limestone building, 32 by 50 feet, whiststone trimmings; hot air heat; cost \$3,000; projected. For John Stephens, semi-detached dwellings, brick, stone trimmings; cost \$3,500; under way; D. L. Binns, builder.

Quincy, Ill.—Architect John Batschy reports: For J. F. Peiper & Co., three-story brick and stone factory building, 60 by 110 feet; cost \$8,000; under way; Fick & Specht, builders. For Joseph Weltin, two-story brick dwelling, 24 by 40 feet; cost \$3,500; under way; B. Schullian, builder. For P. L. Dickhut, two-story brick and stone dwelling, 35 by 55 feet; cost \$6,000; under way. For Illinois Soldiers' and Sailors' Home, two two-story brick cottages, 63 by 65 feet; cost \$11,000; contracts not let.

Ravenswood, W. Va.—Architect E. W. Wells, of Wheeling, reports: public school building, to cost \$15,000.

Spokane Falls, Wash. Ter.—For business buildings this season seems to be about at an end, but some more residences are talked of.

Architect H. Preusse reports: For Goetz & Baer, four-story brick, stone and granite building, 117 by 119 feet; cost \$145,000; up to second story; A. Hoe, mason; D. Waters, brick mason; — Roberts, carpenter. For Victor Dessert, three-story brick and stone hotel, 72 by 100 feet; cost \$45,000; up to first story; E. C. Covey, mason; — Pray, carpenter. For Kaufman & Tilton, three-story postoffice building, 60 by 80 feet; cost \$32,000; nearly completed. For A. H. Clarke, two-story residence; cost \$8,500; under way. For Dr. C. L. Penfield, two-story residence; cost \$9,000; under way. For Dr. J. E. Sandy, two-story residence; cost \$11,000. Also several less important dwellings under way and projected.

Architect J. G. Proctor, of Tacoma, has prepared plans for the Medical Lake Insane Asylum; main building four stories high, 416 feet front; two wings, three stories and basement, 50 by 172 feet; to be built of brick and granite.

Springfield, Mo.—Architect W. F. Hackney, of Kansas City, reports: For F. R. Massey, two-story frame residence, to cost \$6,000; projected.

St. Louis, Mo.—Architects Kirchner & Kirchner report: For School Board, "Blair" School building; cost \$20,494; August Fick, contractor. "Garfield" School building; cost \$14,530; August Fick, contractor. "Hodgen" School building; cost

\$19,935; B. Neumeister, contractor. Plans prepared for the "Crow" School building, 55 by 70 feet, two stories high, brick with cutstone trimmings, steam heat; cost about \$20,000. Making plans for the "Cabanne" School building, 40 by 55 feet, two stories high, brick and stone, steam heat; cost about \$15,000.

Architect Charles F. May has prepared plans for two two-story brick and stone dwellings, 30 by 42 feet, to be built on Westminster Place; cost \$7,500. A two-story brick store and dwelling, 40 by 55 feet, on the corner of Seventeenth and Benton streets; cost \$7,000.

Architects Louis C. and W. M. Bulkley have prepared plans for a four-story brick and stone business building, 58 by 103 feet, corner of Main and Spruce streets; cost \$35,000.

Architects Grable & Weber: For John Meier; two-story brick, stone and granite residence, 38 by 55 feet; cost \$10,000.

Architect August Beinke: For Christian Hall, two story brick and stone dwelling, 35 by 34 feet; cost \$6,500.

The J. B. Legg Architectural Company has prepared plans for S. B. Parsons for a two-story brick and stone flat building, 25 by 55 feet. For Frank Juett, two-story brick and frame dwelling, at Benton, Missouri; cost \$3,500.

Architect T. W. Brady has prepared plans for four two-story flat buildings, 39 by 50 feet; cost \$6,000.

Architect Ad. Monschein has prepared plans for three flat buildings, 55 by 67 feet; cost \$12,000; Wm. Daman, contractor.

Architect Chas. K. Ramsey has prepared plans for Mrs. E. W. Gould for a two-story brick and stone residence, 42 by 42 feet; cost \$7,000; C. Linnenkohl & Co., contractors.

Architect J. W. Herthel has prepared plans for remodeling the International Bank building at a cost of about \$7,500. For E. J. McDonald, two-story brick and stone residence; cost \$4,000.

Architect August Beinke has prepared plans for a brick and stone Evangelical church (Rev. C. G. Haas), 50 by 72 feet, at College Hill; cost \$12,000; Wm. Balmer, contractor. Also preparing plans for a brick Evangelical church, 52 by 66 feet, to be erected on Herbert street; cost \$12,000.

Architect John Beattie has prepared plans for an addition to the Immanuel Church at Old Orchard; cost \$5,000; Theo. Boppe, of Kirkwood, contractor.

Architects Eames & Young: For Prof. J. B. Johnson, two-story residence, 35 by 40 feet; cost \$6,000.

Architect August Beinke: For Mrs. C. Rumpf, two-story brick and stone residence, 32 by 48 feet; cost \$4,000; John Schott, contractor.

Architects Kirchner & Kirchner have prepared plans for Julius Leon for a two-story brick store and flat building, 26 by 76 feet; cost \$6,000; H. R. Becker, builder.

Architects J. B. McElfrick & Sons prepared plans for a seven-story brick, stone and terra-cotta business building, 100 by 76 feet, on Christy avenue; cost \$60,000.

Architect Chas. F. May has prepared plans for J. R. Taylor for two three-story brick and stone residences, 40 by 50 feet; cost \$5,000; J. C. Heckeler, builder.

Architect Chas. K. Ramsey has prepared plans for P. T. Burk for a two-story brick and stone residence, 21 by 52 feet; cost \$5,500.

Architect W. Albert Swasey has prepared plans for E. A. Moore for a two and one-half story frame and shingle dwelling, 40 by 53 feet; cost \$8,000. For E. Ansonmoor, two and one-half story frame and shingle dwelling, 35 by 53 feet; cost \$6,500; H. A. Duffner, contractor. For D. F. Gray, Jr., two-story residence, 40 by 47 feet; cost \$16,000; A. Rogers, contractor. For Miles Sells, three story brick, stone and terra-cotta residence, 25 by 63 feet; cost \$6,000; Chapinann & Thursby, contractors.

St. Paul, Minn.—Architect John H. Coxhead reports: For C. M. Carlson, frame residence on Laurel avenue, hot water system of heating, closets and bath, stained glass, hardwood finish, electric bells, marble mantels; cost \$9,000.

Architect C. B. Seaton reports: For H. E. Partridge, frame dwelling at St. Anthony Park; cost \$3,000.

Architects Willcox & Johnston report: For trustees of St. Luke's Hospital, brick and stone hospital building; fireproof; cost \$75,000.

Sunfield, Mich.—Architect Claire Allen, of Ionia, reports: For L. B. Towns-end, brick and stone store building, 24 by 80 feet; cost \$3,000; contract not let.

Thomasville, Ga.—Architects Bruce & Morgan, of Atlanta, have made plans for Reed & Thompson for an opera house, to seat 800; chairs, scenery and stage fittings required; address owners.

Watertown, Dak.—Architect L. V. Lybrant. For M. E. Society, two-story frame church building, 58 by 98 feet, stained glass, steam or hot air heat, electric lights; cost \$10,000 or \$12,000; commenced May 5; Grunnell & Johnson, masons; L. V. Lybrant, carpenter.

Wheeling, W. Va.—Architect E. W. Wells reports: Y. M. C. A. building; cost \$70,000. Improvements to St. James Hotel; cost \$15,000.

Wiaraton, Ont.—Architect J. C. Foster, of Owen Sound, reports: For Joseph Robinson, brick store and opera house building, 44 by 77 feet; cost \$5,000; projected.

Wichita, Kan.—Present condition quite good, with flattering prospects for fall season.

Architect C. W. Terry reports: For C. W. Bitting, two-story and attic frame dwelling, 44 by 48 feet; cost \$6,000; under way; W. H. Sternberg, builder. For Robert Black, three-story brick addition to hotel, 25 by 37 feet; cost \$4,000; under way; J. A. Nixon, builder. For J. W. Moffatt, two two-story frame dwellings, 26 by 48 and 25 by 34 feet; cost \$5,000; J. A. Nixon, builder.

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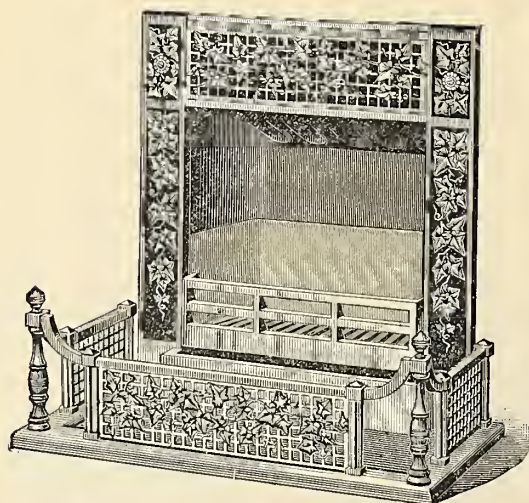
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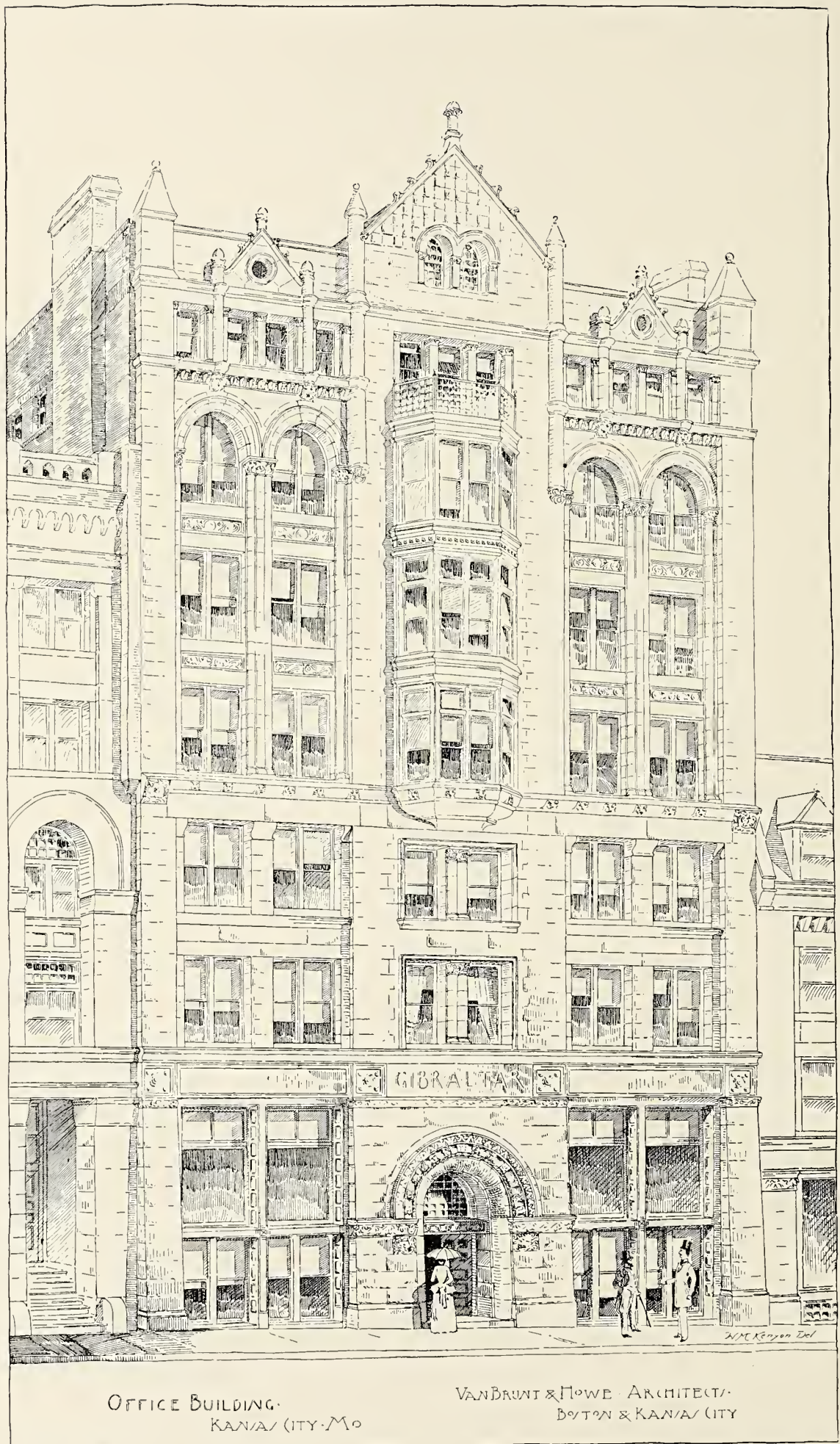
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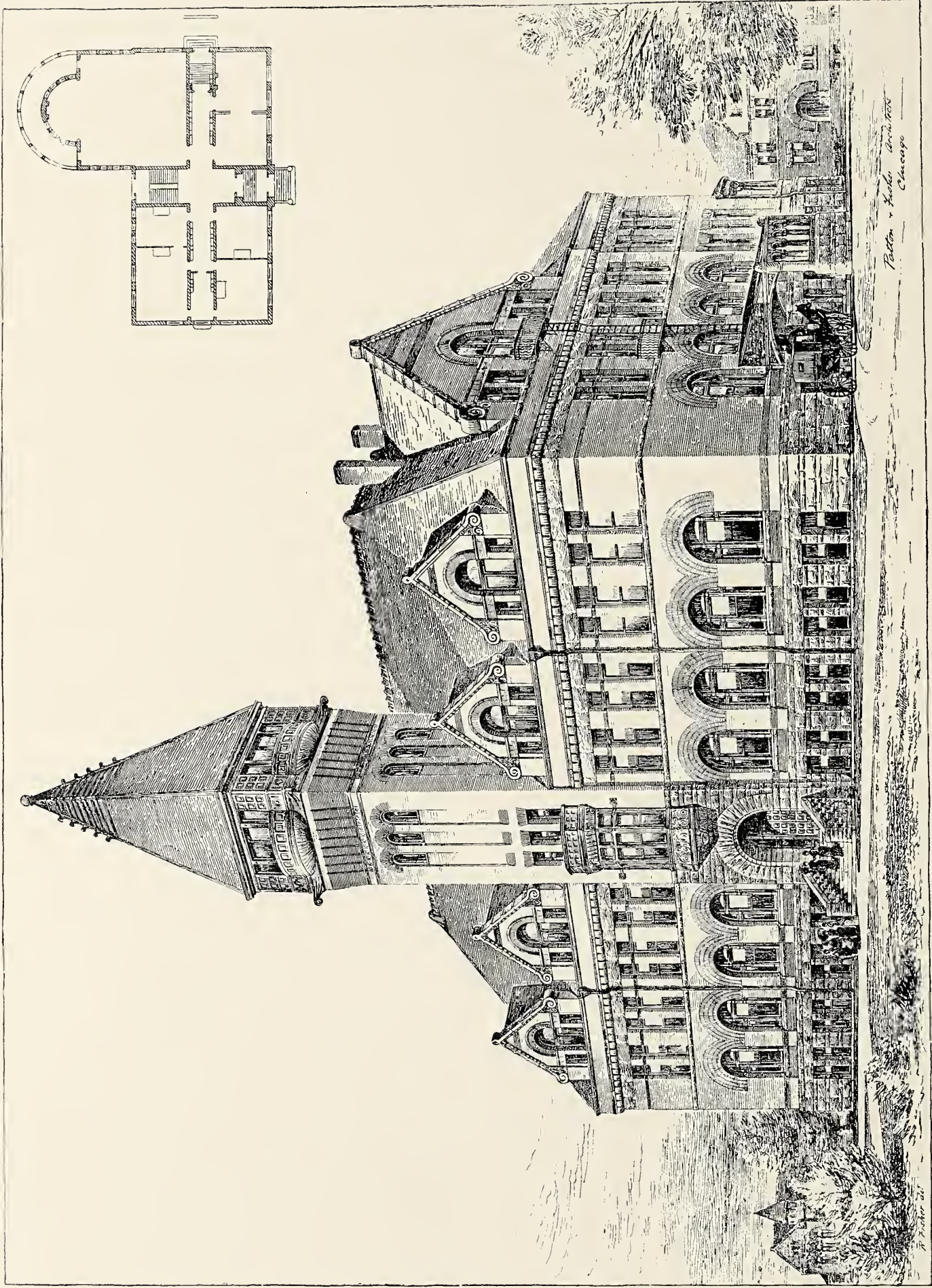
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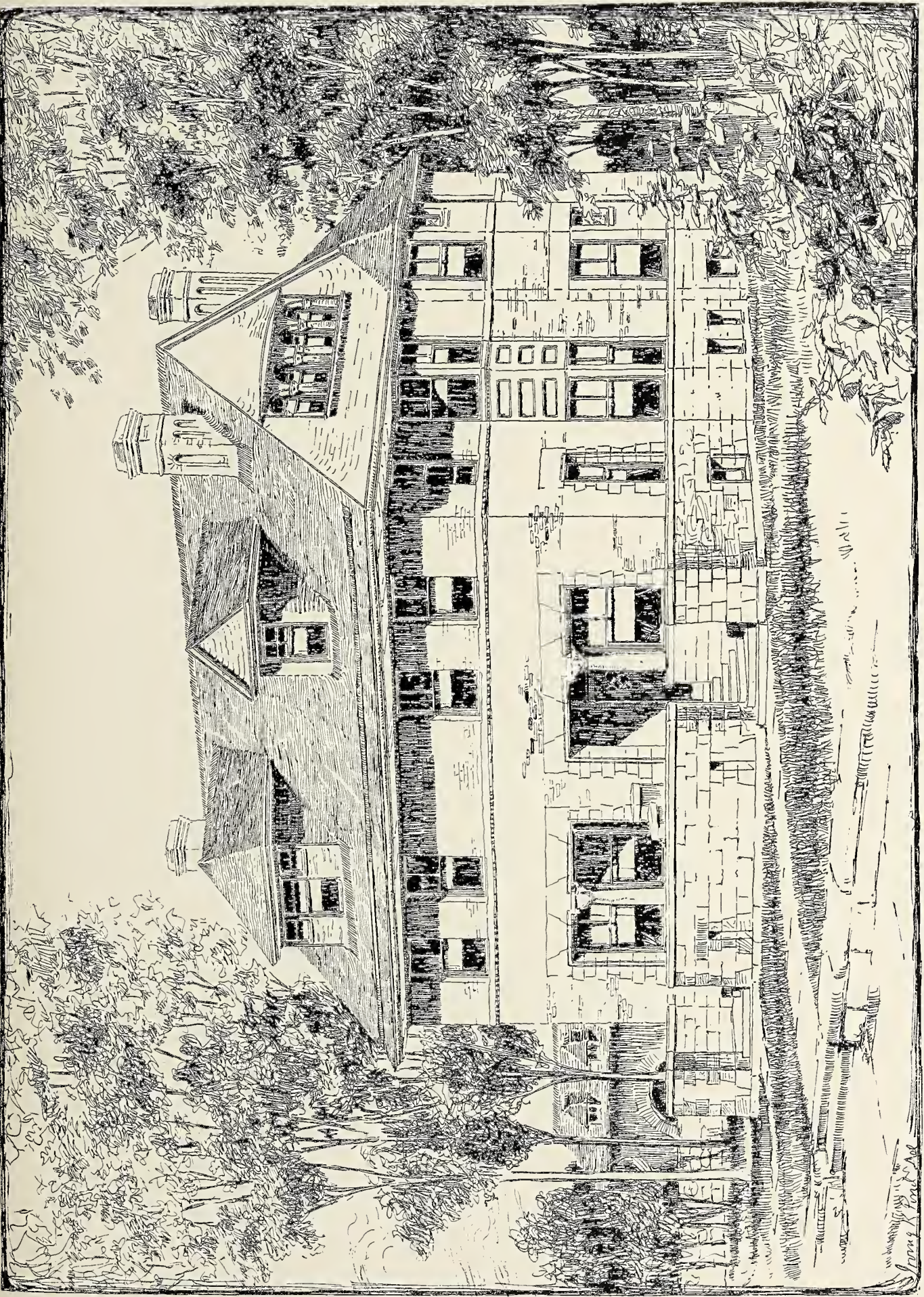
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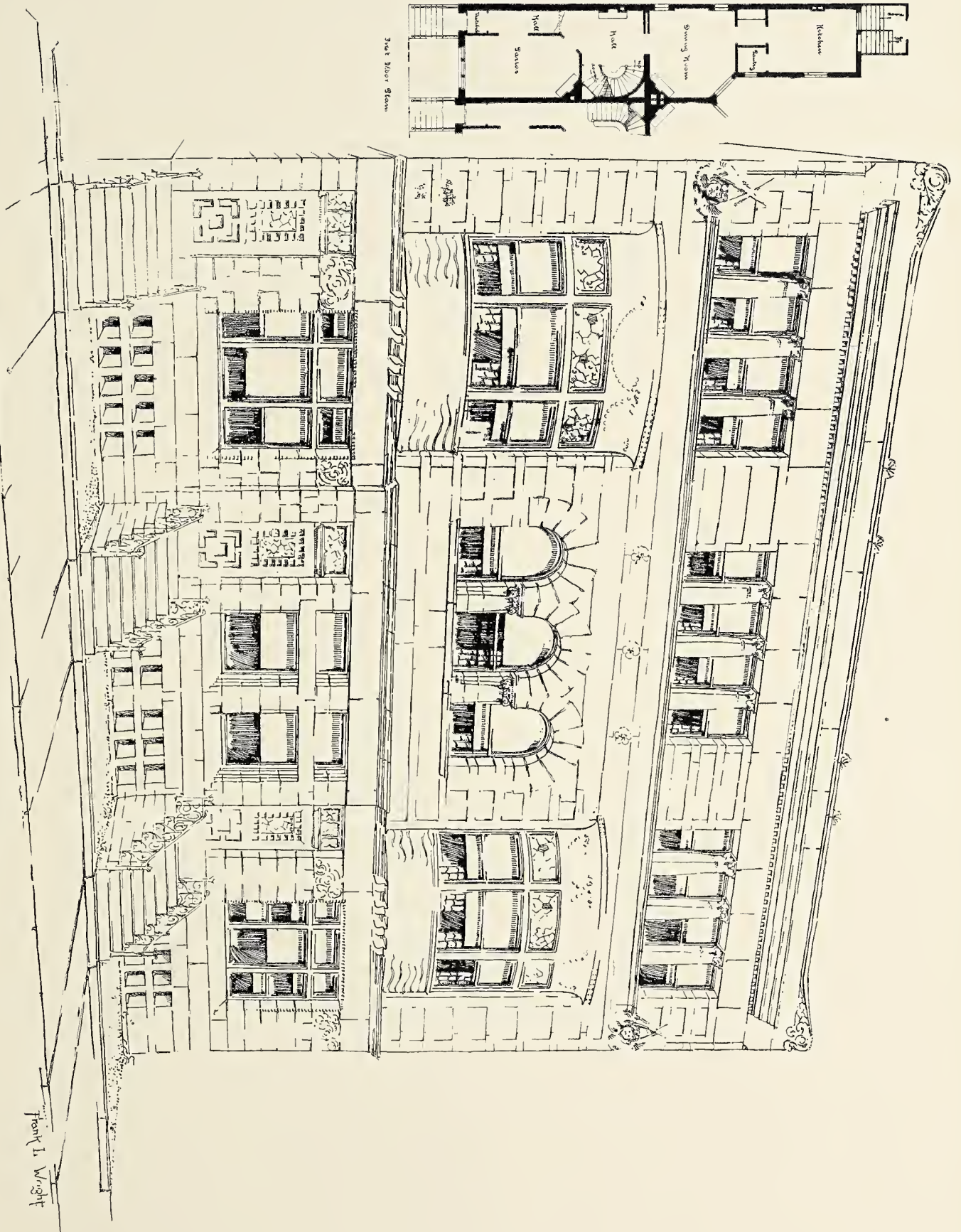


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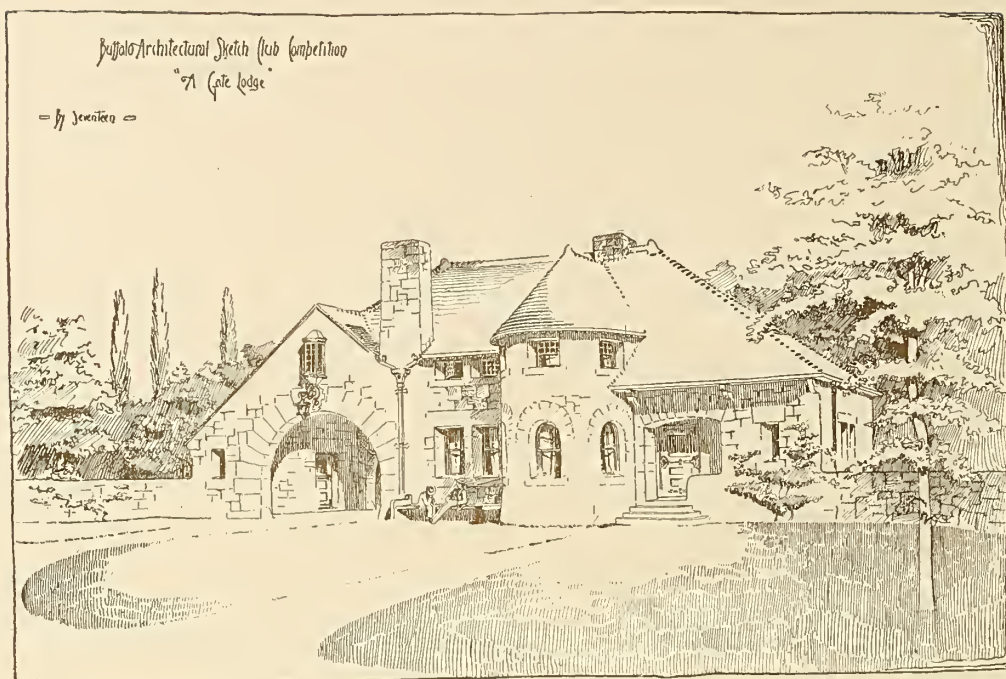


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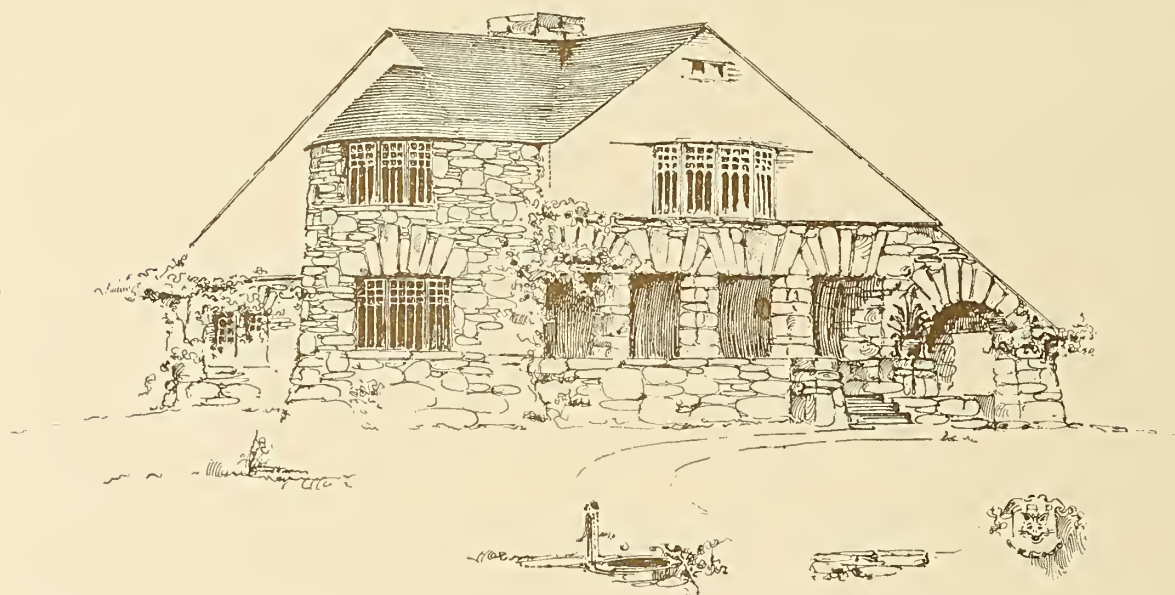


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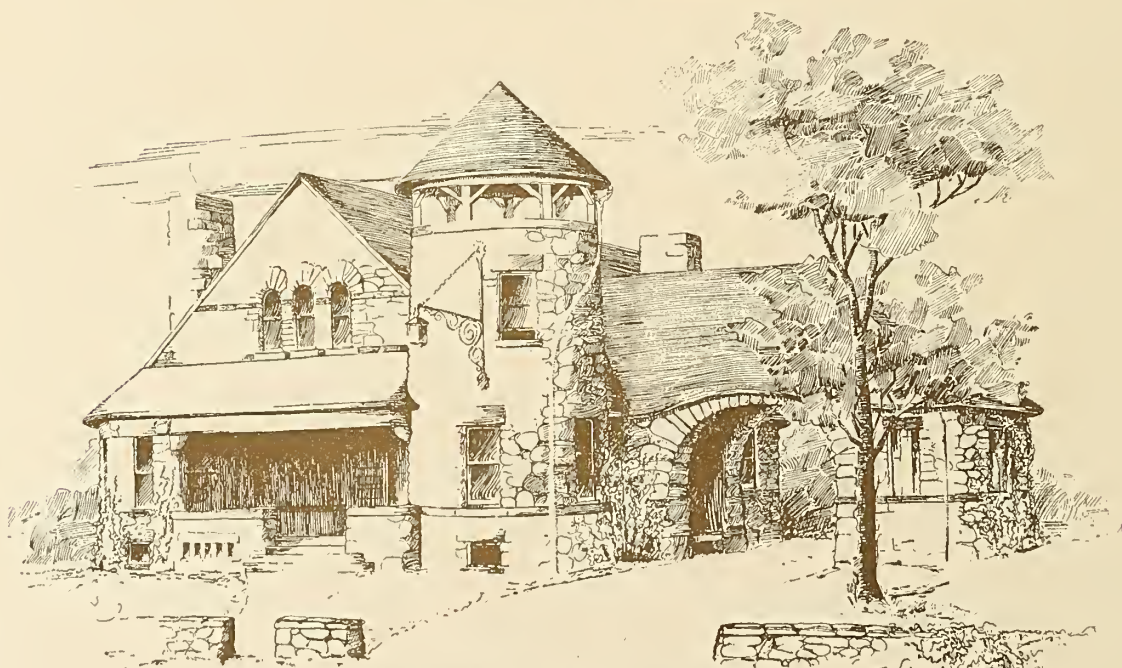
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PUT not thy trust in princes, nor in republics, may well be said by Mr. Smithmeyer and repeated by every architect in the United States. Waste not your time and energies upon the solution of any problem propounded to your profession by the government of your nation, for no matter how faithful and diligent, no matter how untiring and unremitting your quest for the best solution may be, all will be vanity and vexation of spirit. Sixteen years ago the project of providing for the ever-increasing congressional library a suitable building had matured sufficiently to evoke an official call for an architectural competition, in response to which twenty-eight designs (two of them of foreign authorship) were received. The award in this competition was made by Senators T. O. Howe and J. S. Morrill, and Mr. Spofford, the librarian of congress. This general competition was followed three years later by a select competition, participated in by Mr. Edward Clark, architect of the United States Capitol extension; Mr. A. R. Estey, architect of the United States Postoffice at Boston, Massachusetts, and Mr. J. L. Smithmeyer. The award in this case was made by Senators D. W. Voorhees, M. W. Ransom and Geo. F. Edmunds, and Representatives Geo. W. Geddes, James Richmond, and Wm. Claflin. No definite action followed either of these authorized competitions, but the project was kept before the public, and quite a number of volunteer designs were submitted, until in 1886 forty-one sets of plans had accumulated, and were considered by the Joint Library Committee of the forty-eighth congress, consisting of Senators D. W. Voorhees, Thos. F. Bayard, Justin F. Morrill and John F. Miller, and Representatives O. R. Singleton, G. M. Woodward and Newton W. Nutting. This committee selected the plans of Messrs. Smithmeyer & Pelz, which selection was approved by that congress, and the beginning of the work authorized, together with the employment of Mr. Smithmeyer as architect of the building.

WE know nothing of the merits or demerits of the designs of Mr. Smithmeyer. We have never seen them, nor any others of those prepared for this work, save only the sketches published by our Mr. Poole in illustration of his ideal library building. It is to be regretted that two authorities as competent as Mr. Poole and Mr. Spofford should have arrived at conclusions so widely divergent; for, personally knowing and highly esteeming the profound knowledge and the disinterested zeal of Mr. Poole, we cannot escape the conviction that his views, so lucidly and fearlessly stated in his brochure upon the subject, should have received honorable consideration in the determination of the design for the Congressional Library Building. But Mr. Spofford was and is the librarian of congress. He also is a man whose opinions upon matters relating to his specialty cannot be ignored, and being on the ground, having the ear of senators, representatives and other officials at all times, and being personally interested in and responsible for the successful management of the library, it is not surprising that his ideas should have prevailed over those of Mr. Poole, although, perhaps, if the decision had rested with us it would have been otherwise. To Mr. Smithmeyer the action of the forty-eighth congress was an act of poetic justice. For thirteen years he had made the study of the requirements of a great library building the aim of his life. He neglected his private practice—he became a collector of books, periodicals, pamphlets, plans—of everything that had appeared in print that could throw light upon the problem of library construction, to the mastering of which

he had devoted his life. Long journeys and sea voyages were undertaken, authorities of European and American libraries personally sought out and consulted, and afterward corresponded with; all for the purpose of accumulating, collating and digesting every attainable fact and opinion that might assist in developing the ideal public library building.

THERE is in this country a great railroad corporation, controlling and operating thousands of miles of road, the president of which (incidentally also the owner of a majority of its stock) was paid for his services as president the sum of \$1,200 per annum. For many years every employé expressing dissatisfaction with his salary was silenced by the query whether he deemed his services worth more than those of the honored president of the road. There prevails at Washington in the dealings of the government with architects and other professional men a similar practice. Their profits and emoluments are scaled in accordance with and in proportion to the salaries of the justices of the supreme court and of other high dignitaries, and accordingly Mr. Smithmeyer, when made architect of the Congressional Library Building, was not paid the commission of five per cent upon its cost, which any private client would have paid him, but he was engaged upon a salary (less than \$6,000 per annum, we believe) scarcely more than that paid by some of the architects of New York, Boston, and Chicago, to their chief assistants. Now, the complexities of construction and elaboration of design of a modern, first-class fireproof building are such that the working out of the necessary calculations and drawings requires the services of a little army of calculators, draftsmen, and specialists of all kinds. We know, for instance, that there are in Chicago alone five firms of architects engaged in the erection of first-class buildings whose office expense run from \$100 per day upward, to, in one case, fully \$75,000 per annum.

WE know of one building, not as large as the Congressional Library Building, and not yet under roof, the outlay upon which to date for services of draftsmen, specialists, calculators, superintendents, drawing materials, stationery, etc., has been to its architects upward of \$30,000, and that with the exercise of the greatest economy, and without counting the value of the personal services of the architects themselves, one of whom has expended over four hundred days and many nights in actual work upon the drawings, while the other has expended as much, if not more, time upon special investigations and calculations relating to the many problems presented by this work. It was, therefore, a matter of absolute necessity that Mr. Smithmeyer should surround himself with a staff of competent assistants, some employed at high salaries, two or three almost equal to his own, but no greater than those paid by the great architectural firms of New York, Boston, or Chicago, for similar services. It was natural that he should select for the most responsible positions those who had aided him in his preliminary work, and who were familiar with all the details of his preliminary studies. Having formed an effective office organization, the work of preparing the drawings was carried on apparently with most commendable thoroughness, which also was extended to the supervision of the work of putting in the foundations.

AND here is the beginning of Mr. Smithmeyer's tribulations. He had the temerity to object to the quality of materials and work furnished by certain contractors. Forthwith the influential friends of these contractors discover, first, that Mr. Smithmeyer, in employing, on behalf of the govern-

ment, a competent staff of assistants for his work, is making the government pay for services which ought to have been rendered by him personally. Second, that in objecting to the use of inferior materials for the foundations of the building, and in insisting upon the use of the *best* only, he is making wrongful and invidious discriminations. Third, that his plans are good for nothing anyway—that the ideas of Mr. Poole, or of Mr. This, Mr. That or Mr. The Other ought to have governed him instead of those which he did follow, and fourth, that the general treatment of the building as contemplated by him is inartistic. Charge number one we have answered already, charge number two has been discussed in the professional journals as a charge against the contractors before it was brought up as a "you're another" charge against Mr. Smithmeyer. Charges three and four lie rather against the congress of the United States, which, after thirteen years of examination and study of the subject, determined upon these designs.

IT may be true that certain resolutions adopted by the house of representatives of the present congress are to some extent justifiable, and that Mr. Smithmeyer's designs for the Congressional Library Building are not the best that could have been produced. It may be that the competition of five distinguished architects proposed by these resolutions will produce a better design than the one of Mr. Smithmeyer. These things may be or may not be true; but it is true that if these resolutions of the house of representatives are concurred in by the senate, approved by the president, and made the act of the government of the United States, then that government will be guilty of an act of perfidy as despicable as would be the repudiation of the national debt or the reënslavement of the negroes. There are those to whom the end justifies the means, who are willing that, to secure ever so slight a gain or advantage, the nation might commit an act of bad faith. Would it not be well for those gentlemen to follow their course to its ultimate conclusion?

FOR thirteen years the congress of the United States was apparently engaged in an earnest and sincere effort to secure the best design obtainable for its library building, and during that time its committees had the assistance of the best specialists in the land in their investigations, and there were before them plans prepared by the best and most competent architects in this and other countries. One inofficial and two official competitions were instituted. In each Mr. Smithmeyer's plans were deemed by the congressional committees to be the best. For sixteen years these preferences, officially expressed by the congress of the United States, induced Mr. Smithmeyer to devote his time to the service of his country, confident in the good faith of its people and of its official representatives.

BUT the house of representatives of the present congress determines that the conclusions of its predecessors for the past sixteen years were injudicious and inartistic, and at once the work of these years is to be annulled. Can intelligent congressmen expect that five *really* distinguished architects will, in the light of Mr. Smithmeyer's experience, participate in this new competition, only to take the chances that the winner may after another thirteen years of struggle secure an appointment to a position of little honor and less emolument, with the risk of receiving, at the hands of a future congress, the treatment now being prepared for Mr. Smithmeyer? Is it not more than probable that this proposed competition, and the subsequent competitions quite certain to result from a following-up of the precedent set by the

present congress, will enlist successively less and less competent men, and will entail for each successive tentative effort to erect a library building new and increased wastes of public funds and waste of valuable time, to say nothing of the deterioration of public faith in the efficiency and honesty of the government?

A BREACH of faith on the part of the government of a great people is too high a price to pay for even the certainty of a great material gain. The carrying out of the proposal of the house of representatives would be a blunder as well as a crime. Better by far that the new building for the congressional library be not quite up to the ideal of the present congress, which ideal is of course sure to be different from that of each succeeding congress, than that our nation break faith with even the most undeserving of its citizens, much less with one who has, at its order and request, devoted so much labor and effort to its service, with so little prospect of substantial reward.

THE Joint Committee upon Uniform Contracts met at the rooms of the American Institute of Architects, New York, June 6. The American Institute of Architects was represented by Architects O. P. Hatfield, of New York; J. H. Windrim, of Philadelphia, and Alfred Stone, of Providence, Rhode Island; the Western Association of Architects by Architects Samuel A. Treat and William W. Clay, of Chicago, and the National Association of Builders by John S. Stevens, of Philadelphia; John J. Tucker, of New York, and George C. Prussing, of Chicago. Mr. William H. Sayward, secretary of the National Association of Builders, was made secretary of the joint committee, and Mr. O. P. Hatfield was elected chairman. The call having been read by the secretary, the committee proceeded to discuss a form of contract. The meeting occupied two days, and a form was drafted, which, being submitted to legal revision, and proofs having been approved by the members of the committee, will be placed before the architects and contractors of the United States for general use.

LA *Semaine des Constructeurs* of June 16, 1888, gives a partial outline of the proceedings of the annual "Congress" of French architects, held in Paris on the 11th ultimo, in the hemicycle of the École des Beaux Arts. M. Bailly, president of the Société Centrale, presided. M. Louis Bernier, *architecte du gouvernement*, presented a report on architecture at the salon, in which, after remarking the public indifference to the architectural displays at the salon, he reviewed critically but cursorily, the various drawings recently exhibited there, and closed with a vigorous protest against the Draconian rule (*règlement Draconien*) which excludes from the salon exhibitions all work which has previously appeared in public competitions, whether at the "École," or at the Academy of Fine Arts, unless it shall have been premiated or actually carried into execution. He also demanded larger discretionary powers for the jury, and, on the other hand, called for greater severity on their part in making awards. He charges occasional excess of indulgence in the judges, whose award is popularly accepted as a guarantee of merit, while the designs premiated are sometimes hardly above mediocrity. A memorial address followed, on the life and works of M. Ruprich Robert, inspector-general of historic monuments, and professor in the school of decorative arts, born in Paris, February 18, 1820, deceased May 7, 1887. M. Robert was actively connected with the *Revue de l'Architecture* and with *La Semaine des Constructeurs*, for which journals he furnished decorative designs almost to the day of his death. Considerable space is devoted to remarks on an architectural legend or motto

often quoted by M. Robert: "Respect for the Past; Liberty in the Present; Faith in the Future," a tersely suggestive motto. M. Charles Lucas followed with a brief account of the provincial convention of French architects held at Toulouse, September 18-24, 1887, which included excursions to points of interest in Toulouse, and at Albi and Carcassonne, and essays upon a diploma for architects, a comparison between English and French gardening (strange topic for an architectural congress!), the responsibility of architects, theater fires, a canal between the two seas, and historic architects. *La Semaine* says the most important result of this convention was the formation of the Regional Association of Architects of Mid France, with headquarters at Toulouse. There were previously in existence similar "regional associations" of architects in northern France, Puy-le-Dome, Haute Loire, and other architectural societies or clubs in Bordeaux, Toulouse, Marseilles, Haute Savue, Seine Inferieure, and nearly a dozen other places, beside the venerable Academy of Architecture at Lyons. Concerning a diploma for architects, it was proposed that it should relate exclusively to scientific and technic abilities, without the slightest hint at any infringement of their æsthetic talents, tastes or tendencies.

THE prize competition inaugurated by the managers of the Chicago Art Institute for the best American painting was decided, June 18. The adjudicating committee consisted of Professor Henry C. Ives, of the Art Institute of St. Louis; Mr. Thomas B. Clark, the well-known artist and critic of New York, and Mr. C. L. Hutchinson, president of the Chicago Art Institute. Mr. Clark had upward of twenty pictures entered, but because of his position on the committee withdrew them from the competition. The decision of the committee was unanimous. It allotted the Ellsworth prize to the glorious, ideal landscape (80) entitled "The Bathers." It is the very latest work from the brush of the foremost American landscape painter, George Inness, and is regarded by members of his immediate family as the finest picture he has ever painted. It has never been seen by the public before its exhibition in this collection, having been brought direct from the artist's studio by its owner, Mr. James W. Ellsworth, the founder of the first or \$300 prize. The Art Institute prize of \$250 goes to the Dewing picture called "Half-Length Sitting Figure" (208). It is an admirable example of perfection in drawing and unusual purity of flesh tone. It is a portrait, the subject being Mrs. White, wife of Stanford White, of the widely known New York firm of architects, McKimm, Mead & White. Mr. Thomas W. Dewing is a native of Boston, but resides in New York, where he has been very successful in portraiture, all of his efforts in this direction receiving much praise for genuine refinement and brilliancy of execution. The tangible evidence of excellence in case of both pictures goes, of course, to the painters, the owners wearing the nominal honors only, which is sufficient, inasmuch as it is a high indorsement of their artistic taste.

THE Association of Ohio Architects will hold its third annual meeting, August 16. The meeting place designated at the last convention was Cleveland, but there is a strong desire on the part of the members to change this to Put-in-Bay. Among that lovely group of islands an ideal summer conference could be held, and rest and change from city sights and sounds would make the time spent doubly profitable. Let it be Put-in-Bay by all means, and invite professional friends from Detroit, Buffalo and Chicago. The change can be ordered by the Executive Committee, thirty days' notice being given.

Photography in Architecture.

PART IX.—BY FRED D. FOSS.

A MORE intimate acquaintance with hydrochinone impresses the user with its excellent qualities as a developer of the highest order. Numerous experiments lately made lead one to believe that a chemical has at last been discovered that will eventually do away with all other developing mediums excepting, perhaps, the pyro-soda in its present form, the only objections found by the professional to the use of hydrochinone being its cost and comparatively slow action. These objections are easily done away with when the constancy and reliability of it are taken into consideration, and the slow action can readily be overcome by using a solution containing less water, though anyone who has had experience, however limited, in the development of photographic negatives will most assuredly agree that slow development is eminently the proper way to handle the negative when the result desired is a fine deposit and beautiful graduations of tones, from the intense high lights to detail in the deepest shadows. The professional will claim that it takes too much time to handle a negative that will probably be used for a dozen cabinet pictures only, in the above manner, but let them try it and then compare the actual results of their work—both artistically and financially—and the deduction will be placed on the profit side of the ledger. The kindness of friends enables me to place before the readers of this article (should there be any), two formulas that are worthy of the highest respect, coming as they do from two gentlemen eminently qualified to write on matters pertaining to photography. The first, that of Dr. Hosmer Allen Johnson, will be found to give a negative that leaves nothing to be desired in the beautiful graduations of tones and excellent printing qualities, providing the negative has been properly exposed (timed), but a slight deviation from correctness, either over or under exposed, can be remedied so easily that it becomes a pleasure to sometimes make a mistake for the satisfaction of correcting it. Dr. Johnson's formula is a one-solution developer, and is easy to prepare and manipulate. It is as follows:

Water.....	64 ounces.
Carbonate soda (crystals).....	4 "
Sulphite of soda (crystals).....	8 "
Hydrochinone	1 "

This developer, when dissolved, will give a very clear solution, with only a slight, very slight, trace of yellow color. To use, take enough of the solution to fully cover the plate—say 4 ounces for a 6½ by 8½ negative—and with one sweep fully cover the plate in the developing dish; rock the dish so that no streaks, may appear and continue development until full detail shows in the shadows, when the plate is removed from the dish and thoroughly washed under running water to remove every trace of the developer, and then placed in the fixing-bath (hypo-sulphate of soda, 8 ounces; water, 40 ounces) until it is thoroughly fixed. It is a good plan to allow the plate to remain in the fixing-bath a few minutes after the plate is apparently fixed, to dissolve out any imperceptible particles that might remain, then wash under running water for at least half an hour, and place the negative in the drying rack to dry spontaneously. The other formula is that of Mr. Gayton A. Douglass, and is prepared as follows:

NO. 1.	
Water.....	20 ounces.
Carbonate of soda (granular)	2 "
NO. 2.	
Water.....	20 ounces.
Hydrochinone	½ "
Sulphite of soda (granular)	2 "

To use, take of:

Water.....	1 ounce.
No. 1	1 dram.
No. 2	2 drams.

(Any amount of developer can be used by observing the proportions.)

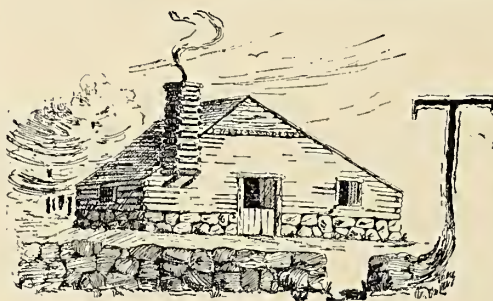
Never throw away the mixed and used developer, as it retains its energy and developing qualities for—well, I'll not venture to say how long, as I have some that has been in daily use since the latter part of January, and, barring a slight tendency to slowness, is as good as when freshly prepared. This, I think, kills one of the arguments against its use—its cost—as it certainly can be used repeatedly with primary effect. In using Dr. Johnson's formula, should under-timing make its appearance in the negative, it is easily remedied in the following way: First obtain the desired density in the high lights (bearing in mind that a negative developed with hydrochinone loses very little of its density in the fixing-bath), and then finishing up with water made slightly alkaline with a solution of carbonate of soda. Carbonate of soda, 1 ounce; water, 5 ounces. A good proportion to use is: Soda solution, 2 drams; water, 4 ounces. It will be found that this method will give fine detail in the shadows with a remarkable softness of high lights in an under-exposed negative that would otherwise be harsh and contrasty. Should overexposure show itself, the development can

readily be restrained by using a few drops of a solution of bromide of potassium (bromide of potassium, ½ ounce; water, 5 ounces), but care must be taken not to use too much of the bromide solution, as it exerts a very great restraining influence with hydrochinone, and the resulting negative is very apt to have a greenish color. Do not pour the mixed developer containing bromide into the bottle holding the normal (used) developer, but have a separate bottle for it; then when overexposure unexpectedly makes its appearance pour off the normal developer and flood the plate with the developer containing bromide. By this means, using soda solution to accelerate, and bromide to restrain, the operator has the negative under full command at all times. Should the action of Dr. Johnson's formula appear too slow for most operators, it can be made to act as energetically as the pyro-soda developer by simply reducing the amount of water one-half, using 32 instead of 64 ounces. Patience is a virtue that must be cultivated in the development of photographic negatives.

(To be continued.)

Cincinnati Centennial Exposition.

BY LAWRENCE MENDENHALL.



THROUGHOUT all ages, improvement seems to have been the paramount idea of all nations, regulated, of course, by the surroundings, as well as necessity.

Even the dark ages of superstitions failed to eliminate it from the mind of man, and the glorious motto of "onward and upward" has proved to be truly a guiding star to success, but not perfection. Education has been another powerful factor, for with education comes observation, with observation comes application, and patient application is sure to bear fruit. In one branch, especially, of the many arts and occupations followed by man, by the means of which he reasonably expects to reach the goal of success, architecture stands prominently before us all. With architecture, I also include the several materials and appliances that enter into house construction. I should certainly be inflicting a torment equal to Job's boils, besides displaying inexcusable ignorance, were I to enumerate the one-thousandth part of the number of inventions of our own country, for it is simply a repetition, as it were, of the survival of the fittest. It would also be irrelevant to present a tautological essay, so with the above short preface, let us proceed with the subject matter.

The Centennial Exposition of the Central States and Ohio Valley now in full operation at Cincinnati, is the largest and most complete, with the exception of the Centennial at Philadelphia, ever held in this country. It commemorates the settlement and opening up to the enterprises of commerce, of what is now the richest territory of the country, with its hundreds of thrifty towns and cities, and acres of rich farming land. Little did the pioneer realize what his fortitude would result in, when he climbed the mountains from the east, braving the elements, and founded on April 7, 1788, at Marietta, the first settlement, or Losantiville (Cincinnati), December 28, 1788. The "architecture" of the first houses was necessarily crude, logs and boat gunwales aided by a little mud, being the materials utilized in the construction of the house. The Queen Anne anomalies of the present day were unknown to the pioneer, therefore, to him, securing peace of mind. An early writer on Cincinnati architecture thus describes the same as it was in 1814: "The dwellings are generally two stories high with neat, sloping, shingled roofs, with Tuscan or Corinthian cornices. Several have lately been built with an additional story, and exhibit, for a new town, some degree of magnificence. A handsome frontispiece or balustrade occasionally affords an evidence of opening taste, but the higher architectural ornaments—elegant summer houses, porticos, and colonnades—are wanting. Very few of the houses are painted, which is the more remarkable, as the timber of which they are built is so perishable as to require protection from the weather." What a contrast to the present city, with its many beautiful structures, which have supplanted and are supplanting slowly, but surely, the antiquated buildings of early days.

But here we are at the Centennial buildings proper, occupying Washington Park and covering about four acres. They are exceedingly graceful in design, while the interior arrangements meet fully, and, in fact, exceed all expectations, and the architect, H. E. Siter, as well as the contractors, Messrs. Cotteral & Son, can feel justly proud of their work. While the buildings are filled with exhibits and people of the present, yet

we cannot help but hear the echoes of the past from the sturdy blows of the pioneer's ax in felling trees, or the "driving home" of the wooden peg or wrought-iron nail. Alongside, like a pigmy, stands near the entrance, a log cabin, such as is shown at the commencement of this article, recalling to many of the visitors "how dear to my heart are the scenes of my childhood." Entering from Elm street, you are at once confronted with the magnitude of the work accomplished, but collecting your ideas you bring order, as it were, out of chaos, by going systematically to work. Unfortunately (as the writer tried to secure), there is no regular "Building Exhibit" as a distinct department, but displays are scattered. In strolling around you are thus constantly stumbling against interesting exhibits, connected more or less closely with the building industries.

The first display that catches the eye of a builder or painter is the beautiful one made by Harrison Bros., of Chicago, showing in an admirable manner the many colors manufactured by this old firm. As an artist would say, "it is a charming bit of color."

Adjoining them is the display made by the F. Hammar Paint Co., of Cincinnati, but not so attractive, for the reason that it consists of paint in boxes and cans. Just below these exhibits is one of the finest, if not the finest, in the exposition, made by C. S. Ransom & Co., Cleveland, Ohio. The booth, built in rich Moorish style, is truly a modern dream of Oriental luxury and indolence. All its surroundings are in perfect harmony with the beautiful Moorish fretwork shown. As the exposition advances, this display cannot fail to attract. The display, adjoining this, of stained glass and wood mantels, made by the Mitchell Furniture Co., of this city, is very fine indeed. While comparisons may be odious, yet the Meader Furniture Co. also make a display worthy of the highest praise.

Retracing our steps, stopping for a minute to admire the center fountain with its colored electric lights, we stumble across a well-built summer house which W. C. Peale & Bro., city, have erected to show their cottage paints, equal to Joseph's coat of many colors.

With no reflection on the merit of their displays, I can only mention those of Henry Disston, Philadelphia; Cincinnati Auger Works; F. J. Meyers Manufacturing Co. (wire and brass), Covington, Ky.; the Bromwell Manufacturing Co. (same), city; and Eureka Mantel & Grate Co., in the "Park building." In the building known as the Music Hall, the finest exhibits are those of Wm. Willer, of Milwaukee, who has erected a very picturesque booth, and fitted the same with his sliding blinds; Sidney Planing Mill Co. makes a similar exhibit, but not so extensive; and the Cincinnati Corrugating Co., who have built a house to illustrate their roofing and siding as it appears applied. The Patent Revolving Sash Co., of Cincinnati make a display of sash, as does also the Taylor Sash Co.

And thus I could go on and mention exhibits of utility and otherwise, of furnaces and plumbing, etc., but my space grows less and less. However, I must not close until I mention the very creditable display of architectural drawings and watercolors, as well as the extremely interesting one made by the technical schools. The work of the latter not only does the students great credit, but redounds to the credit of the founders of these truly beneficial institutions, for when you give a boy a trade you give him a fortune. In the foregoing, I have but briefly described our exposition from a building standpoint, not mentioning the magnificent art gallery, or the busy machinery hall; the historical collection, or the wonderful government exhibit; but hope to do so in a subsequent letter, for they are replete with objects of intense interest.

Cheap Plans a Bad Investment.

HERE is a tale of two buildings in one city: A and B were shoe merchants, who bought lots about the same time in a growing section of their town, and erected thereon stores of about equal value for their own use. So far the course and experience of the two were alike. But A employed an architect of good standing and paid him \$500 for his services, while B hunted up an obliging builder who generously furnished the plans for nothing. At this stage of our narrative B was financially \$500 ahead of A, and took much satisfaction in contemplating his own superior shrewdness.

Fortunately for B, but quite as much by chance as by cuteness, he fell into the hands of an honest and competent builder, who gave him as good a building as he knew how to construct. Each merchant moved into his new store, the two being but a few blocks apart, and set about working up trade. A's store, while costing the same as B's, was unique in design, a well-proportioned novelty, which attracted much notice when building, and was widely talked of. This talk advertised A's business as well as A himself. Then he had a handsome engraving made of his store and published it in the papers and printed it on his letterheads and envelopes. It attracted attention, and custom grew. This also enhanced the value of adjacent real estate, and, having built on only half his lot, A was able in a year to sell the other half for an advance of a \$1,000 on cost. This put him abreast of B, and \$500 better.

Moreover, the purchaser employed the same architect, and erected another taking front adjoining A's, and this also was talked of and drew trade, which drew other trade, and again property advanced in value. Then a fine store, to correspond with this improving locality, was erected

opposite, and shortly two more of the same sort. The locality became choice for business, and after a few years A sold out store and business at a profit which amounted to a comfortable fortune.

B's complacency over the \$500 he had saved on his plans soon vanished as he compared his monotonous, box-like front with the other store. No one talked about his store, there being absolutely nothing in it to talk about. In time, other equally monotonous fronts were erected opposite and adjacent to his. The street has its character fixed as of inferior grade; no enterprising party who wants to erect a fine improvement thinks of going to that vicinity now though land continues cheap there. B does about the same business every year, and considers his property worth about the same now as when he bought and built. He would gladly sell for a moderate advance, but, the location not being popular, he has few offers, and is still holding on, waiting for better times.

The moral is that parsimonious economy may begin almost anywhere more safely than in the selection of an architect to draw one's plans.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1889, at Philadelphia. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month. Annual meeting first Thursday in October, 1888. Next meeting last Saturday in September. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. Next quarterly meeting, first Tuesday in June. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October in each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. G. W. Williamson, secretary. Annual meeting, November 5, 1888.

CHICAGO ARCHITECTURAL SKETCH CLUB.

THE regular meeting of the Chicago Architectural Sketch Club was held July 2, the principal business being a paper upon Greek Architecture, by Architect Frank L. Lively. Though the evening was warm, a full attendance of the club sat and listened with deepest attention for almost an hour and a half to Mr. Lively's most excellent comment upon Athenian art and architecture. The paper was full of reference and quotation from authors, from the early Greeks down to those who are now studying Greek architecture and bringing to the light of day new art treasures from the ruins of Athens' former splendor. Mr. Lively's paper was received with applause, and a cordial vote of thanks accorded him. His paper showed close study in not only the forms of Greek architecture, but in its history as well, and while it is too long for publication in an architectural journal, and upon a subject more or less familiar to most readers, as a collection of

reference and other data it is exceedingly valuable. The competition for designs in furniture was indefinitely postponed. The next competition, which is for a carved panel, two feet square, full size, closes July 20.

ARCHITECTURAL LEAGUE OF NEW YORK.

The following notice of the Fourth Annual Exhibition of the League has been issued, bearing date of July 1, 1888:

DEAR SIR,—The Executive Committee of the Architectural League desire to call your attention to the Fourth Annual Exhibition of architectural work and the allied fine arts. The exhibition will be held in the Fifth Avenue Art Galleries, No. 368 Fifth avenue, from December 27, 1888, to January 12, 1889. Architects, artists, sculptors, decorators, workers in wood, tapestries, etc., and metal workers, are hereby reminded that the space at the disposal of the managers is large, and will permit a thoroughly representative exhibition in all branches. This notice is sent in order to give intending exhibitors abundant time to consider their contributions. Further information may be obtained by addressing the secretary. Regular blanks with full information will be forwarded on application to the secretary after October 1.

By order of the Executive Committee, F. A. WRIGHT, Secretary.

The secretary also forwarded the following copy of the report of the Committee on Permanent Location to the Executive Committee of the League:

To the Executive Committee of the Architectural League:

Your Committee on Permanent Location beg to submit the following report: They have investigated a rumor that an association of gentlemen were to build a building especially adapted to the use of clubs and societies similar to yours. They find that there is no assurance that such a building will be built, and that even if it were built, it would not be suitable for your purpose, and that the proposed rental (some \$1,500) would be more than your committee would feel disposed to pay.

Your committee have made various inquiries and calculations as to the advisability and ways and means of taking a building for themselves. They have had in mind, as suited to the conditions, a stable or similar structure, and have seen a number of such which they deemed suitable and suitably located, their rents varying from \$800 to \$1,200. As to ways and means they submit the following:

From the report of the Treasurer they find that the expenses of the League for last year, 1887, were about as follows:

YEARLY EXPENSES.	
Nine dinners, at \$30 average	\$270 00
Summer excursion	40 00
Printing and stationery	175 00
	\$485 00
YEARLY INCOME.	
160 resident members, at \$10 dues	\$1,600 00
30 " " at \$10 initiation	300 00
10 non-resident members, at \$5 initiation	50 00
	\$1,950 00
EXPENSE OF HOUSE (estimated).	
Rent	\$1,000 00
Janitor	500 00
Fuel	120 00
Light	100 00
Insurance	30 00
Total	\$1,750 00
Other yearly expense	485 00
Total yearly expense on present basis	\$2,235 00

Your committee suggests to meet this deficit, that the initiation fees be kept the same as at present, and the dues be increased to \$20 for resident, and \$5 for non-resident members.

With the present membership this would make the annual income:

160 Resident members at \$20 (dues)	\$3,200 00
25 Non-resident members, at \$5 (dues)	125 00
30 Resident members, at \$10 (initiation)	300 00
10 Non-resident members, at \$5 (initiation)	50 00
	\$3,675 00
	2,235 00

Assets over liabilities

To meet the first cost of fitting such a house, your committee suggests the issuing of \$2,500 worth of bonds in such value each as may be thought advisable.

We do not think that the cost of necessary repairs will exceed this, especially as several members of the league have offered to give certain portions of furniture and decoration.

The above-mentioned bonds, bearing interest at 5 per cent, would call for an amount of \$125 for the first year, the balance of surplus being devoted to the redeeming of bonds, so that in three years all the issue should be redeemed.

In this report no account has been taken of the probable increase in membership which would correspondingly increase the revenue and the expenses, but the expenses in a much smaller amount.

Your committee are strongly in favor of taking definite steps in this direction, and await your further instructions.

E. P. TREADWELL,
GEO. MARTIN HUSS,
WM. C. HAZLETT, Chairman.

THE WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS.

About thirty members of the Western New York State Association accepted the invitation of the architectural department of Cornell to make a day's excursion to the University during commencement week, and met at that place, June 19.

Most of the members reached Ithaca by the early trains, and the morning was given up to an informal inspection of the university buildings and grounds. At one o'clock a dinner, tendered by Professor Babcock, Mr. W. H. Miller and Professor Osborne, was served in the Cascadilla dining room.

At two o'clock a short meeting of the association was held in the faculty room of the university, at which an introductory speech by Professor Babcock, on behalf of his department, and a very cordial address of welcome by President Adams were delivered. These were replied to by J. G. Cutler, of Rochester, president of the association. The members were then personally conducted through the Fiske-McGraw house by the architect, W. H. Miller, who clearly explained all the interesting points connected with its construction and history. The members expressed themselves charmed with the beauties of the house and of its excellent adaptation to the hill. At four o'clock an exhibition of lantern views of European architecture and scenery was given by Professor Osborne, which concluded a day much enjoyed by all. Emphatic approval of the work of the department, as evidenced by the drawings in the drafting rooms, was given by all the members of the association.

Among those present were: J. G. Cutler, Mr. Walker, of Walker & Nolan, and Otto Block, of Rochester; Mr. and Mrs. C. E. Colton, Geo.

W. Baxter, Jr., E. M. Buel and J. H. Kirby, of Syracuse, the latter editor of the *Architectural Era*; Cyrus K. Porter and Miss Porter, of Buffalo; Messrs. Pierce, Dockstader and J. Q. Ingham, of Elmira; J. Blaby, of Palmyra. The secretary of the association, W. W. Carlin, of Buffalo, was unexpectedly called to Boston, and telegraphed his regrets.

The next meeting of the association will be the annual meeting, and will convene at Buffalo, October 9.

THE NATIONAL ASSOCIATION OF MASTER PLUMBERS.

The sixth annual convention of the National Association of Master Plumbers was held at Boston, June 26, 27, 28. A full representation of delegates were present. A large amount of business was transacted, and the following officers were elected for the ensuing year:

President—John Trainor, of Baltimore.
Vice-President—E. J. Hannan, of Washington.
Secretary—John J. Carey, of Baltimore.
Financial Secretary—Enoch Remick, of Philadelphia.
Treasurer—John J. Hamblin, of Chicago.
Sergeant-at-arms—David J. Collins, of St. Louis.
State Vice-Presidents—Colorado, J. T. White, of Denver; Connecticut—George S. Arnold, of Hartford; District of Columbia—John Mitchell, of Washington; Illinois—Robert Griffith, of Chicago; Iowa—George Kendall, of Clinton; Kansas—James Foley, of Leavenworth; Kentucky—Simon Shulhafer, of Louisville; Maryland—J. C. Mitchell, of Baltimore; Massachusetts—Thomas J. Tute, of Boston; Minnesota—J. J. Dunnigan, of St. Paul; Missouri—Henry Goss, of Kansas City; Nebraska—M. B. Hussey, of Omaha; New Jersey—D. W. Littell, of New York—W. G. Reid, of Rochester; Ohio—Mr. Snyder, of Cleveland; Pennsylvania—William M. Wright, of Philadelphia; Rhode Island—William L. Whipple, of Providence; Tennessee—T. J. Mooney, of Nashville; Virginia—W. E. Foster, of Norfolk; Wisconsin—George S. Lyon, of Milwaukee.

Executive Committee—John Trainor, president, Baltimore; E. J. Hannan, vice-president, Washington; John J. Carey, secretary, Baltimore; John J. Hamblin, treasurer, Chicago; Enoch Remick, financial secretary, Philadelphia; M. J. Byrns, retiring president; Isaac Riley, Boston; W. F. McCarthy, Topeka; W. H. Rothrock, Baltimore; J. G. Weldon, Pittsburgh; James Allison, Cincinnati.

Sanitary Committee—Thomas Cantwell, St. Louis; Wm. Norris, St. Louis; John F. Reardon, St. Louis; W. E. Goodman, Milwaukee; E. S. Hornbrook, Kansas City.

Legislative Committee—P. M. Moffatt, Brooklyn; Thomas Radcliffe, Brooklyn; Walter T. Hudson, Brooklyn; Wm. Dunnett, Baltimore; Zalmon Goodsell, Bridgeport, Conn.

Essay Committee—Edward Murphy, John Mitchell, Joseph A. McDonald, Wm. Young, Caldwell Frazer, all of New York.

Apprenticeship Committee—J. J. Weaver, E. Wm. Harkness, Jr., W. H. Doyle, all of Philadelphia.

The incoming administration was empowered to fill all vacancies. The next annual meeting will be held at Pittsburgh, Pa.

Notes from Foreign Journals.

THE world-renowned St. Stephen's Church, in Vienna, like the majority of our venerable monuments of architecture, is having trouble with its foundations, and requires incessant vigilance and repairs to keep it in fair condition. Last year its lofty spire and tower settled so as to open serious cracks at its junction with the church walls, also in the adjacent vaults and arches. The expenditures for restoration amounted to nearly thirteen thousand dollars last year alone.

In its issue of June 9, 1888, *La Semaine des Constructeurs* publishes illustrations of two adjacent entrances to business houses on Wall street, New York, which it credits to Mr. M. Hunt, architect. Probably Mr. Richard M. Hunt is meant; but our contemporary is in error as to one building at least, the well-known Queen's Insurance Company's offices, which are the work of C. W. Clinton and J. W. Pierson, architects. Both entrances are excellent, but the illustrations which show the lower story only, fail to do justice to either front. These buildings have been landmarks in that part of Wall street for quite a respectable number of years already. In the photogravure edition of *THE INLAND ARCHITECT* our transatlantic cousins will find numerous illustrations of American architecture considerably more recent, if not more modern.

BUILDING accidents will happen in the best regulated foreign cities occasionally, as well as in this country, where each man is so largely a law to himself. In Berlin, on the twenty-seventh day of last May, a scaffold five stories high, employed for certain repairs and renovations to the royal theater, on which quite a large force of workmen were engaged, fell to the ground, inflicting injuries more or less serious to nearly fifty men. The explanation given is that the scaffold was unduly and unskillfully loaded with material at one point; that a part of this material slid off, and falling against certain braces broke them loose, whereupon the whole five stories of scaffolding, with its load of men and material, swayed and came crashing down. The *Wiener Bau Industrie Zeitung* adds: "The responsibility for this mishap (recklessness), as usual and everywhere, cannot be determined."

A WITTY French writer exclaims as follows at the ill-concealed jealousies which rage among his artistic countrymen: "Holy Jupiter! how impossible it is for any of our artistic gentry to look with an attentive or even sympathetic glance at the work of a brother artist. Would you but test for yourself the bitterness of this foolish jealousy, just take a stroll through the salon in company with a professional man, whether he be a painter, a sculptor, an engraver or even an architect. Verily, for myself, I would much prefer on such occasions the society of an intelligent amateur without artistic pretensions, were he only a *bourgeois*, to one of these supersensitive, supercilious artistic people, with their sneers, their sarcasms, their irony, their universal ill-humor as to anything not done by themselves, or which fails to conform to their petty tastes, opinions, preferences,

prejudices. * * * This narrow-mindedness, so unworthy of educated and intelligent people, and which should have been long since eliminated by study and experience, this silly, almost libelous prejudice is proof of a grave defect in our system of artistic education," etc. If this be a true sketch, we may, perhaps, congratulate ourselves on not having yet reached quite so high an artistic development as our foreign confrères, and if there be anything in the French system of art education and of incessant competitive contests to develop such unhappy jealousies, we may do well to be on our guard as to adopting that system in all its features. The degrading spirit of professional jealousy is already far too prevalent among American architects and artists.

Our Illustrations.

Residence for J. L. Cochran at Edgewater, Ill.; J. L. Silsbee, architect, Chicago.

Longitudinal section of Auditorium building, Chicago; Adler & Sullivan, architects.

Residence for Mr. Waring, Brooklyn, N. Y.; E. G. W. Dietrich, architect, New York.

Design for twenty-eight-story office building, iron construction, of L. S. Buffington, architect, Minneapolis, Minn.

Chicago Architectural Sketch Club competition for a sideboard; first place, T. O. Fraenkel; second place, M. G. Holmes; third place, W. B. Mundie.

Office building, to be built in Minneapolis, L. S. Buffington, architect. This structure is to be erected under the patent of Architect L. S. Buffington, known as "Buffington's Patent Iron Building Construction." It consists of a continuous skeleton of iron, commencing on the iron footings and continuing of iron and steel to the full height. The framework consists of a series of continuous laminated, riveted iron posts, diminishing in size as they ascend; braced diagonally, after the manner of lattice bridge girders, and horizontally braced by the iron beams of each floor, which form an integral portion of the building. The whole frame is covered on the exterior with a non-conducting substance of absolute reliability. The exterior is formed of stone and copper. The stone is carried at each story, or oftener when necessary, by means of horizontal shelves of iron—the shelves themselves being hidden by the stone. The roof is to be of tile, except the apex, which will be formed into a glass look-out, from which a necessarily vast expanse may be viewed. The first story will be a grand rotunda, with twelve elevators and two flights of stairs situated in the center. The elevators are arranged so that each two floors have their own elevator, so that the passengers to the twenty-second or twenty-third story, for instance, may make the trip without stop, thus expediting the service greatly. No woodwork will appear in the building except the doors and window sash. When finished no portion of the constructional iron will be visible. Contraction and expansion are provided for under the patents. Each office has its own safe or series of safes, built in the outer wall and forming a part of the structure—which the architect claims is a feature never before used in building. Another important consideration in the iron construction is the reduced thickness of the walls, as those on the exterior of the building do not in any part exceed 22 inches, thereby giving more light and air to the offices. The building does not weigh one-half as much as an ordinary masonry one of the same size, and is much cheaper and more quickly built. The building is 80 by 80 feet on the ground, 350 feet to top of glass out-look, and contains 728 large offices, all of which are outside rooms.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Six full-page photogravure plates of details of the Rookery office building, Chicago; Burnham & Root, architects. The views shown are as follows: La Salle street entrance; vestibule of La Salle street entrance; Adams street entrance; two views in covered court (two full-page plates); detail from La Salle street façade. Description of the building was published in Vol. VII, No. 9.

Through misinformation, the photogravure plate of "Residence for John Davis, St. Louis, Mo.," published in Vol. XI, No. 7 (June No.), credited Henry Isaacs as the architect. This is an error. Shepley, Rutan & Coolidge, Boston, Mass., are the architects.

The Chicago Auditorium Building.

A LONGITUDINAL section of the Auditorium building now under construction at Chicago, by Architects Adler & Sullivan, will be found in this number, which will undoubtedly interest most of readers in view of all of the favorable comments upon the acoustic qualities of the Convention Hall published in the daily press during and since the late National Republican Convention.

The attention of readers is directed to the ingenious devices to be used for cutting off the upper galleries from the main auditorium. The upper one of these is already in successful operation. The lower one has not yet been constructed.

Many inquiries have been made as to the means used for ventilating the building, and surprise has been expressed that, with audiences ranging from eight thousand to twelve thousand people assembled in the building, and in the absence of the fans and other means of ventilation to be applied in the completed building, the air was kept at all times quite pure and in constant motion. In answer to these inquiries, the following statement, obtained from the architects, is published:

There are in the building two brick shafts, to be ultimately used as exhaust shafts, and one brick shaft which will be ultimately used as an induction shaft for the air. The aggregate area of these shafts is about 250 square feet. All of these extend above the roof of the hall. Openings were cut into the walls of these shafts at different places so as to distribute the area of these openings as equally as possible for the different levels of

the house, and at the foot of the shafts there were placed thirty salamanders distributed in proportion to the area of the respective shafts. Fires were made and maintained night and day in these salamanders, one hundred bushels of coke per day being used for this purpose. The application of these quite simple and almost primitive appliances served to maintain a very strong current of air through open doors, open skylights, and through openings in the risers of all steps of the floors, sufficient in volume to keep the atmosphere pure and sweet.

New Publications.

A TEXT BOOK ON ROOFS AND BRIDGES. Part I. Stresses in Simple Trusses, by Mansfield Merriman, Professor of Civil Engineering in Lehigh University, Pa. Octavo, cloth, 118 pages. \$2.50. John Wiley & Sons, Publishers, 15 Astor Place, New York.

The instruction at Lehigh University, Bethlehem, Pa., on roofs and bridges, is arranged in four parts, namely, the numerical computation of strains in simple roof and bridge trusses, their graphic determination, the designing of bridges, and the discussion of suspension, cantilever, continuous and arched bridges. This book gives the first part of this course. It begins with the simplest form of the truss, and develops the mechanical laws of external and internal forces, action and reaction, etc., as applied to framing in a very direct and concise manner, and apparently with great simplicity. The first chapter treats of roof trusses of all the usual forms except curved roofs, shows what allowance should be made for snow and wind pressures and for changes of temperature, and gives average weights of roofing materials. The second chapter discusses the ordinary forms of highway bridges, as the Warren, Howe, Bowstring, etc., and determines both minimum and maximum stresses. The third chapter treats of railway bridges, and explains the latest mode of computing strains actually caused by the concentrated loads on each wheel of a typical locomotive, instead of by an assumed uniform maximum load per linear foot of span. While there is an occasional reference to formulas in trigonometry and in analytical geometry, the most of this work can be read with ease by one whose mathematical knowledge does not extend beyond elementary algebra. This book is well illustrated with numerous cuts in the text, and has a good variety of practical examples. Blank pages, alternating with every printed leaf, provide for annotations by the reader.

MECHANICS OF THE GIRDER, a treatise on Bridges and Roofs, by JOHN D. CREHORE, C. E., illustrated by 124 cuts and numerous tables. Octavo, cloth, 575 pages. \$5. Published by John Wiley & Sons, 15 Astor Place, New York.

The author of this work was early in life professor of mathematics in Washington University, at St. Louis, where he was highly esteemed for his eminent learning and ability, especially in his favorite pursuit of mathematics. Subsequently he established himself in Cleveland, Ohio, and there found ample employment as a mathematical expert in making analyses and computations of strains, etc., for various bridge manufacturers and others. He was therefore especially fitted by talent, education, inclination and a life-long familiarity with the subject to write a treatise on the *Mechanics of the Girder*, which should be at once thoroughly scientific and thoroughly practical, while also thoroughly original.

The introductory chapters develop very exactly and comprehensively the laws of force in their most general application, and apply them in computing the strains on a framed girder under live and dead loads variously placed. Then follow chapters on moments, deflections, the camber of bridges, the strength of iron pillars, lateral bracing, and the calculated weights of bridges. The author then develops an original method of determining by a direct procedure what form of truss and what proportions of parts will prove the most economical for a given span and load, and he applies the principles thus deduced to three actual computations of a Pratt truss, showing in each case the most economical height, number of panels, etc. He also applies his method to other forms of truss, with practical examples, strain sheets, etc.

Prof. Crehore's style is clear and logical. He assumes in the reader a familiarity with mathematics so far as the elements of the differential calculus. This book is one of the most valuable contributions to the literature of truss building, particularly as employed in bridges, which has ever been made in any language, and cannot fail of a high appreciation by educated architects and engineers everywhere. As a standard authority on modern practice it is unexcelled, if equaled, by any other work.

Mosaics.

PROFESSOR H. H. BELFIELD, director of the Chicago Manual Training School, has gone to California to enjoy two months vacation.

THE Chicago city directory for 1888, just published, gives 404,761 names, or, using a multiple of $3\frac{1}{2}$, a population for Chicago of 850,000.

THE main dining-room in Southern Hotel, St. Louis, is to be remodeled by Architect George H. Edbrooke, of Chicago. All pilasters and wainscoting will be taken out and replaced by Georgia marble.

PROFESSOR W. R. WARE, Architects R. M. Hunt and R. M. Upjohn have been appointed experts to examine and report upon plans for the new municipal buildings in New York. They are allowed \$500 each for the work.

HEALY & MILLET, of Chicago, have secured contracts for the stained glass and frescoing for Trinity Church, Denver; stained glass and frescoing for the Union Depot at Indianapolis, and the stained glass for the Auditorium building at Chicago.

IN the obituary notice of Mr. Glover last month a mistake in the name was made. His name was Joseph N. Glover. He was a member in good standing of the Chicago Builders' and Traders' Exchange, died Tuesday, May 29, 1888, and was sixty-two years of age.

THE Union Brass Architectural Works of this city have been compelled, through the necessity of a largely increased patronage, to remove to more spacious quarters, No. 77 North Clinton street, where, by increased facilities in foundry, machine and pattern shop, the company feels a greater

confidence than ever before in inviting correspondence from gasfitters, plumbers, marble workers, cabinet makers and all other users of art metal work, such as special chandeliers, electroliers, toilet fittings, altar work, chancel rails, lecterns, etc. Designs and estimates are features with the company.

THE importance of the building interest in Chicago and the enterprise of Chicago men engaged in it, was strongly indicated a few days since by the arrival from England of the first English steamer that has ever made the through passage from England to Chicago. The Rosedale is a screw propeller, and brought a cargo of Portland cement for the Empire Warehouse Company.

CALLENDER'S bitumen damp course is a pure bitumen damp course, effectual in the prevention of moisture coming through walls. It is used in large quantities in Chicago, a notable instance being the pit for receiving the scenery below the stage of the Auditorium building, which is some distance below tide-water. Simpson Brothers, Chicago, are the importing agents for this excellent material.

AMONG various devices that have been put upon the market for automatically closing doors, it would seem a new candidate, the "automatic liquid door check and buffer," manufactured by Nimick & Britton Manufacturing Company, meets the case practically, and that in a novel manner. It is so constructed that the door never slams; it can be held by it in any position desired, adjoining or against the wall, and is made of a metal so sensitive to heat or cold that it shuts more quickly on cold days than warm days. It is made for either right or left doors. Only a few of its claims for excellence have been mentioned.

THE July *Century* contains another article in the series which the Rev. Dr. Buckley, the editor of the *Christian Advocate*, has been for some time past contributing occasionally to that periodical. It is entitled "Dreams, Nightmares, and Somnambulism." It will contain a chapter on "Mysterious Dreams Analyzed." A timely article in this number of the *Century*, and one that should be read by every architect and sanitarian, is "Disease Germs, and how to Combat Them." It will be accompanied by a frontispiece portrait of Pasteur, who has made disinfection and fermentation a longer study than hydrophobia, although it is with the latter that his name is more intimately associated in the public mind. George Kennan's Siberian paper in this number will be called "The Steppes of the Irish," and it will include an account of a long ride in an out of the way part of Siberia, among the Kirghis and the Tartars. The usual war articles are continued, and complete an exceedingly interesting number.

Railroad Notes.

THE Michigan Central Railway (Niagara Falls Route), in preparation for summer business, on June 15 commenced running a new and magnificently equipped vestibuled limited train from Chicago to the East. Further particulars can be procured by addressing O. W. Ruggles, the general passenger and ticket agent, at Chicago.

RECENTLY published statistics of the Chicago Union Stock Yards Co., and of the Chicago Board of Trade, show that the Chicago, Burlington & Quincy Railroad is again leading all other lines in the number of cars of live stock and grain brought to that market. This fact speaks for itself, and shows the rapidity with which the Burlington has recovered from its labor troubles.

THE Wisconsin Central Railway has six trains a day running to and from the superb resorts at Lake Villa, Fox Lake, Antioch and Waukesha. Parlor and dining cars are attached to all trains, and omnibuses connect with the outlying lakes. No better recreation for a day or a week can be found than a visit to one of these resorts on the Wisconsin Central. The trains make fast time, and leave and arrive at convenient seasons morning and evening.

TRAVELERS for all important points in the great West or Southwest, should go via St. Louis and the Missouri Pacific, which, including the Iron Mountain and the numerous branches and leased lines in Missouri, Kansas, Texas, the Indian Territory and beyond, is one of the most extensive railway systems in the world. From Los Angeles, San Francisco and San Diego on the Pacific coast to Galveston and San Antonio in the South, and St. Joseph and Omaha in the North, there is hardly an important region or city which it does not reach. Swift time, a perfect track, elegant cars, uniformed employes, and a phenomenal freedom from accident are characteristics of the Missouri Pacific, which all travelers will appreciate. Its long trains run with the regularity of the sun, and almost as smoothly.

DURING the tourist season, June 1 to October 1, a full line of tourist and cheap excursion tickets, via the Chicago & Grand Trunk Railway, will be on sale in Chicago at the offices of the Company, and at the principal offices in the country, by which all seaside and mountain resorts in the East can be reached at very reasonable rates of fare. The route of these tickets is by the Chicago & Grand Trunk Railway from Chicago, thence by Grand Trunk main line, via Toronto, or by the Great Western Division, by way of Niagara Falls; or both Niagara Falls and Toronto may be visited on the same trip, connecting with steamers on the St. Lawrence river, passing by daylight the Thousand Islands and wonderful rapids of that noted stream, and under the world-renowned Victoria Bridge, to Montreal; thence to Quebec, River Saguenay, of the grandeur and solemnity of whose scenery no words can convey an adequate idea; White Mountains, Lake Champlain, Lake George, Saratoga and Hudson river; or via Portland, the noted Casco bay, and watering places on the Atlantic ocean beaches in that vicinity. In addition to regular sleeping cars, during the tourist season, a Pullman palace sleeping car is run on the train which leaves Chicago at 8:15 p.m., direct to Kingston wharf, and dropped there in order that passengers may enjoy a full night's rest and take the Richelieu & Ontario Navigation Company's steamer at Kingston wharf, for a daylight ride down the river St. Lawrence to Montreal. During the tourist season a Pullman sleeping car leaves Niagara

Falls late in the afternoon for Kingston wharf, via Hamilton, connecting with the Richelieu & Ontario Navigation Company's early morning steamer at Kingston, as above. Passengers for Canada now have their baggage examined, passed customs and checked to destination, at our depot in Chicago, thereby avoiding annoyance or delay at the Canadian frontier. In selecting a route east, during the summer season, no pleasanter, more attractive or delightful trip can be found on the American continent than that embraced in one of the many attractive routes of the Chicago & Grand Trunk Railway from Chicago to New England and the sea, taking in Niagara Falls and the beautiful St. Lawrence river. A full description of the routes and prices of tickets will be found in Summer Tours, 1888, published by the company, and which will be mailed to any address on application to E. H. Hughes, general western passenger agent, 103 Clark street, Chicago, Ill.

ROUND-TRIP excursion tickets at low rates are now on sale via the Burlington Route, C. B. & Q. R. R., from Chicago, Peoria and St. Louis to Denver, Colorado Springs, Pueblo, Salt Lake City, Ogden, St. Paul, Minneapolis, and resorts west and northwest. The "Burlington" is the only line running sleeping cars from Chicago to Denver without change. It is the only line by which you can go from Chicago to Denver and be but one night on the road. It is the picturesque line to St. Paul and Minneapolis. It runs daily "fast trains" to Kansas City, St. Joseph, Atchison, Council Bluffs, Omaha, Lincoln, Cheyenne and Denver. Fine government lands are located on its new lines in Nebraska. It is the best line by which to reach all principal land points in the West and Northwest. Tickets via the Burlington Route can be obtained of coupon ticket agents of connecting lines. Send in postage to P. S. Eustis, General Passenger and Ticket Agent C. B. & Q. R. R., Chicago, Ill., 4 cents for a copy of the Burlington Route Guide, or 6 cents for an illustrated book about Colorado and the Garden of the Gods.

Business Outlook.

OFFICE OF THE INLAND ARCHITECT, }
CHICAGO, July 10, 1888.

Business men in general are inclined to take a very hopeful view of the general trade situation. While railroad stockholders and managers may, perhaps, justly complain of declining earnings and traffic, and while manufacturers may complain of disappearing margins and restricted trade, the general public can congratulate itself that cost of production and cost of products are lower, and in all probability permanently lower. Lower values have always preceded enlarging markets. There is a widespread belief that the depression now going on throughout the country will lay the foundation for a year of great activity in 1889. The indications point that way. This hope depends for its realization on the revival of railroad building, and as to probabilities in this direction it is too soon to draw conclusions. Much depends upon the influence of the railroad law now being enforced with considerable drastic effect. It can hardly be accepted as a reasonable conclusion that such a law can improve railroads. Every impartial view of the case justifies the opposite conclusion. The general checking of this year has, on the whole, been productive of good rather than evil results. Manufacturing capacity has been kept pretty well in check. In fact, enterprise in all directions has been under intelligent control. There is no overproduction, no depressing accumulation of goods. Prices have been depressed legitimately, and to that extent competition has declined, because the smaller the margin the less struggle there is to gain it. Throughout the East building activity has not been what it was. Creditable estimates put it at forty per cent off in Boston and New York, and twenty per cent off in Philadelphia. These are guesses, based upon intelligent observation of good building authorities. Throughout the West, conditions on the whole, are somewhat better. There is less building in most of the larger cities, though not in all, and more in small towns and country places, according to all accounts. The iron and steel industry has been depressed through two causes, the larger production growing out of the increased capacity created by active railroad building during the past two or three years, and second, the wonderful increase of our making capacity in the South. Prices are lower, but the reductions have done good. The brickmakers west and south have greatly increased capacity, and have cheapened products relatively by the increase of machinery. The demand for brick will be increased through the growing tendency to use brick in rural localities. The eastern brickmakers have encumbered a temporarily dull trade along the Hudson and in New Jersey. The lumber manufacturers have enjoyed an exceptionally good year, as to amount of business. The expanding demands of the West have prevented a general sagging of prices that was threatened.

The volume of business in building will be perhaps ten per cent behind last year when the totals are cast up. The wages of labor have not been changed. Labor organizations, while determined to hold on to all the advantages already secured, are not disposed to contest so many points, and drive employers to the wall, as they did on many instances and attempted to do on many more last year. The healthy industrial conditions will, no doubt, stimulate much building enterprise this fall and winter. The building trades will be in better condition next winter than last, because of cheaper raw material, and the demonstrated ability of this country to absorb all the accommodations furnished for use and occupancy by building enterprise. Nails, lath, shingles, lumber, wire, hardware, paper, paint, roofing, are all a little lower than a year ago. The real estate craze has been set back. Land and lot owners are willing to sell at more reasonable prices, west and east. The desire is growing among wageworkers, high and low, to own their own homes, and this is a mighty motive power behind building activity. Our advices from many eastern cities are rather favorable than otherwise, and from the West and Northwest the evidences are that substantial progress is being made in building. The appended reports furnish a condensed and comprehensive review of the condition of building in the cities and towns enumerated.

Synopsis of Building News.

Altoona, Pa.—Architect W. L. Plack reports: For John Schunk, remodeling the Brant House; cost \$8,000. For A. E. Goetz & Co., four-story brick business house; cost \$20,000; under way. For H. K. McCauley, frame residence; cost \$12,000; under way.

Aberdeen, Dak.—Architects Pond & Pond, of Chicago, Illinois: For the Union Banking Company, four-story brick bank building, 25 by 142 feet, hardwood finish, steam heat, elevator, electric lights, vaults, etc.

Barnesville, O.—Architect S. R. Badgley, of Cleveland, reports: For M. E. Society, stone church and Sunday school building, seating capacity 1,300, to be built in

the Norman style, of native stone, with slate roof, interior finish of native hardwoods; cost \$20,000; projected.

Bellflower, Ill.—Architect W. H. Milner, of Bloomington and Peoria, reports: For school board, frame schoolhouse, 40 by 40 feet; cost \$3,000; projected.

Bloomington, Ill.—Architect W. H. Milner reports: For First National Bank, five-story and basement stone bank building, 23 by 88 feet; cost \$40,000; projected. For Mrs. Charles Leohr, frame residence, 36 by 50 feet; cost \$3,000; projected. For J. H. Green, stone cemetery vault, 18 by 22 feet; cost \$1,000; under way; Cannon & Dunlap, contractors.

Bowling Green, Ky.—Architect Wm. C. Smith, of Nashville, Tennessee, has prepared plans for J. D. Lewis for a two-story brick dwelling to cost \$5,000.

Architect T. L. Dismukes has prepared plans for the Vanderbilt University for a building to cost \$40,000.

Chicago, Ill.—A compilation of the exact figures by the Building Department shows that there were from January 1, 1888, to July 1, 1888, 2,156 permits issued, contemplating an expenditure of \$11,131,428. The figures for the same period of 1887 show 1,880 permits issued, contemplated expenditure \$9,707,600, showing an increase in 1888 over 1887 of 276 permits issued, and an increased expenditure of \$1,423,828. If the same percentage of increase is shown during the next six months, the year will show an increase of nearly \$700,000 over 1886, which is thus far the heaviest building year in the history of Chicago.

The Chicago Historical Society have invited Architects Cobb & Frost, Jenney & Otis, Burling & Whitehouse and Joseph L. Silsbee to submit plans in competition for a library building, 120 by 131 feet, to be erected on the corner of Dearborn avenue and Ontario street, at a cost of \$150,000. Plans are to be submitted by August 1, but as some members of the committee are out of the city no definite action will be taken until about October 1. It is expected the funds will be in hand by that time, and likely the foundation will be put in this fall.

Architects Flanders & Zimmerman report: For Jonathan Clark, six-story brick and stone factory building, 150 by 80 feet, on Canal street, near Washington; cost \$60,000. For J. Healy, two-story frame cottage at Lake Geneva; cost \$3,000. For Jonathan Clark, three-story brick and stone store and flat building, 55 by 60 feet, 1523-25 State street; cost \$15,000. For D. F. Crilly, three-story brick and stone flat building, 44 by 62 feet; cost \$10,000. For J. B. Carson, alterations, etc., to the Columbia Theatre, consisting of redecorating, new steam heating and ventilating, changing boxes, addition 20 by 50 feet in rear to contain boiler, dressing and property rooms; cost about \$40,000. For the School Board, three-story brick and stone school building, 120 by 150 feet, corner of Gage and Thirty-sixth street; cost \$50,000. Building same as above on Oakley avenue, between Rhine and Brennan streets. For the Heene estate, two-story brick and stone flat building, 50 by 50 feet, on Church corner near Aberdeen street; cost \$6,000.

Architect H. D. Deam reports: For E. H. Solsberg, two-story and cellar brick and stone dwelling, 35 by 48 feet; cost \$6,000. For O. C. Walcott, three-story brick and stone apartment building, 40 by 56 feet; cost \$10,000. Two-story frame flat building, 22 by 56 feet, in Englewood; cost \$4,000. For Charles Eaton, moving, alterations and addition to residence; cost \$3,000.

Architect William W. Clay reports: For W. A. Swart, three-story bank and hall building, 50 by 116 feet, 111th street and Michigan avenue, Tiffany pressed brick, Bedford stone trimmings; cost \$25,000; to be commenced at once. For E. L. Canfield, two-story and attic frame dwelling, 30 by 50 feet, in Lake View; cost \$7,000; contracts let. For himself three-story and cellar store and flat building, 60 by 60 feet, Oakwald avenue and Forty-third street, brick and stone; cost \$16,000; contracts let. For H. W. Mace, three-story and cellar store and flat building, 35 by 55 feet, adjoining above on Forty-third street; cost \$8,000; contracts let. For L. B. Doud, alterations to brick and stone residence, corner of Thirty-fourth street and Michigan avenue; cost \$5,000.

Architect E. Baumann: For J. M. W. Jones, six-story building 100 by 94 feet, on Sherman street; cost \$75,000. The contracts on the new twelve-story office building which is to replace the old Chamber of Commerce mentioned in our March issue are being let.

Architects Burnham & Root have prepared plans for Max Meyer, for a brick and stone residence, to be erected on the corner of Twenty-second street and Prairie avenue, at a cost of \$35,000. For W. H. Frost, Los Angeles, Cal., brick and frame residence, to cost \$12,000. For Mr. Wilson, Pekin, Ill., brick residence; cost \$15,000.

Architects Holabird & Roche: For Wirt D. Walker, six-story factory building, 71 by 75 feet, Dearborn and Harrison streets; cost \$30,000. For H. H. Brown, three-story and basement stone front residence, 25 by 80 feet; cost \$12,000. For William Magill, two-story and attic and basement residence, 45 by 35 feet; cost \$8,000. For John Tait, three-story and basement residence, 30 by 65 feet; cost \$12,000.

Architect S. V. Shipman: For James Todd, store building, 87 Adams street; cost \$17,000.

Architect H. B. Seeley: For L. W. Pearce, store building, 203-205 Jackson street; cost \$28,000.

Architect John H. Wagner has plans for a foundry building, 250 by 80 feet, to be erected east of the P. Ft. W. & C. Ry. tracks, between Thirty-ninth and Fortieth streets; cost about \$45,000.

Architects M. F. McCarthy & Co. have prepared plans for T. B. Baker, for a theater building, to cost about \$250,000. The auditorium will have a seating capacity of 2,200. To be built on Wabash avenue near Eighteenth street.

Architect F. B. Abbott: For S. R. Snowden, three-story flat building; cost \$5,500. For J. R. Dietz, two-story stores and flats; cost \$8,000. For Dr. D. H. Williams, three-story flat building; cost \$15,000. For M. A. Abbott, two-story and basement residence; cost \$5,000.

Architect R. Rae, Jr., has plans for John De Witt, for a five-story and basement store and flat building, 136 by 125 feet; cost about \$150,000.

Architect J. L. Silsbee: For H. R. Durkee, block of dwellings, 80 by 60 feet; cost \$25,000.

Architect L. G. Quackenboss: For Geo. S. Willetts, stores and dwellings; cost \$20,000. For C. H. Gillette, two residences, 46 by 60 feet; cost \$16,000. For M. Higgins, two-story and basement residence, 36 by 83 feet; cost \$20,000. For W. H. Mooney, residence, to cost \$7,000.

Architect J. E.egan has prepared plans for two residences for Dr. John Guerin; cost about \$20,000.

Architect L. G. Halberg: For J. B. Murphy, two-story residence, 35 by 60 feet; cost \$10,000.

Architect W. A. Furber: For George Miller, two-story and basement stone residence, 25 by 74 feet, on Michigan avenue near Thirty-ninth street; cost \$18,000.

Architect Wm. Thomas is making alterations at the Criterion Theater, to cost about \$20,000.

Architect August Bessler: For Mrs. Burns, three-story store and flats, 24 by 75 feet; cost \$7,000. For Rud Perlick, three-story store and flats, 25 by 75 feet; cost \$10,000. For Philip Frey, three-story flat building, 22 by 50 feet; cost \$4,000. For Chas. Franz, three-story flat building; cost \$4,000.

Architects John Woolcott & Son: For C. A. David, two-story stone front dwellings, 50 by 58 feet; cost \$10,000.

Architect L. H. Heinz reports: For A. Bennett, three-story store flat building, 48 by 80 feet; cost \$18,000. For A. Pateck, three-story store and flat building, 24 by 75 feet; cost \$7,500. For S. Eireiner, addition, 46 by 100 feet, cost \$8,000. For L. H. Kruger, two-story store and flat building, 23 by 66 feet; cost \$5,500.

Architect T. N. Bell: For E. K. Butler, two-story stone front residence, 48 by 69 feet; cost \$30,000.

Architect E. F. Durang, of Philadelphia, has prepared plans for a four-story brick and stone building, 200 by 115 feet, to be erected for the Little Sisters of the Poor, on West Harrison street, at a cost of about \$65,000.

Architects Ackerman & Starbuck: For A. McIntosh, four-story stores and flats, 50 by 110 feet; cost \$28,000.

Architect C. M. Palmer: For Alderman Dixon, two residences on Michigan avenue, near Thirty-first street; cost \$40,000. For Potter Palmer, three-story residence, 22 by 84 feet, cost \$25,000. Also has plans for block of seven residences, 168 by 35 feet, on Calumet Avenue and Thirty-ninth street, cost \$20,000. For F. G. & C. E. Springer, block of seven two-story brick dwellings, 168 by 36 feet, cost \$20,000.

Architect F. B. Townsend has prepared plans for C. W. Barrett for a three-story flat building, 30 by 67 feet, cost \$15,000. For F. M. Chapman, factory building at 87-91 Jefferson street; cost \$28,000.

Architect W. L. Carroll: For Alice M. Kirby, four-story flat building, 24 by 100 feet; cost \$10,000. For M. Crossman, flat building, 25 by 75 feet; cost \$5,000.

Architect Edward Steunde: For C. E. Robinson, six-story storage warehouse, 115 by 110 feet, on Clark street, near Twelfth; cost \$75,000. An apartment house, 100 by 95 feet, on Indiana avenue; cost \$30,000. For Wm. Emden, flat building, 21 by 64 feet;

cost \$5,000. For F. Nebel, flat building, 22 by 62 feet; cost \$5,000. For N. A. Stone, two-story brick and stone flat building, 25 by 65 feet, cost \$6,000.

Cleveland, Ohio.—Architect S. R. Badgley reports: For W. H. Doane, two-story brick store building, 20 by 70 feet; cost \$3,000; under way. For H. Hammersley, frame residence, eleven rooms; cost \$6,000; under way. For R. H. House, builder, for H. R. Newcomb, frame residence, twelve rooms; cost \$7,500; under way; day work. For P. D. Briggs, five nine-room frame dwellings; cost \$3,000 each. For W. H. Doane, twelve-room frame dwelling; cost \$6,500; under way; John Kelley, builder.

DeKalb, Ill.—Architect Geo. F. Barber reports: For W. H. Bard, Gowanda, N. Y., frame dwelling; cost \$3,500. For Jos. L. Nealley, Minneapolis, Minn., frame dwelling; cost \$4,000. For J. S. Trites, Sussex, N. B., frame dwelling; cost \$3,500. For E. F. Earl, Paxton, Ill., frame dwelling; cost \$4,000. For M. Montgomery, Holton, Kan., frame dwelling; cost \$1,400. For Frank M. Payne, Reno, Neb., frame dwelling; cost \$3,300. For David Hanna, White Bear Lake, Minn., frame dwelling; cost \$1,300. For T. C. Smith, Fort Smith, Ark., frame dwelling; cost \$3,500. For J. A. Shedd, Fairbury, Ill., frame dwelling; cost \$3,500. For Wm. Earl, DeKalb, frame dwelling; cost \$2,500. For W. L. Pond, DeKalb, frame dwelling; cost \$1,500.

Denver, Col.—Architect Wm. Quayle: For North Denver School Board, two-story and basement brick and stone school building, 170 by 107 feet, making plans for a block of six residences, 125 by 150 feet; brick and red stone; cost \$20,000. The Reithman Block will be built two stories and basement, with walls of sufficient strength to admit an increase to six stories; brick and stone, 125 by 150 feet; contracts being let. For Zang Brewery Co., two-story and basement brick and stone barn, 90 by 130 feet; cost \$30,000.

Architects Balcomb & Rice have let contracts for the erection of a two-story, brick and stone block, to cost about \$8,000. Plans prepared and accepted for Bent County Hospital, brick and stone building; cost \$12,000. To be erected at Las Animas, for E. Track, red stone cottage, to cost \$3,500. For W. S. Babcock, two-story brick and stone dwelling; cost \$3,000. For Mr. Heep, two-story brick and stone cottage; cost \$3,500. Also, cottage for William Cook; cost \$1,800.

Architect John J. Huddart has plans for A. Blanchard, for a two-story and basement brick store and office building, 50 by 150 feet; cost \$18,000.

Architects Baerreson Bros. have prepared plans for an addition to the "Woodside" block, 60 by 40 feet; cost \$12,000. For Stiles & Lamar, two-story and basement brick and stone business block; cost \$12,000.

Architect Henry Dozier: For Chas. Knock, brick and stone double house; cost about \$9,000.

Architect Alexander Cazin has prepared plans for the Holden Smelting Co., for a brick and stone office building, 55 by 100 feet; cost \$7,000. Also, for a brick and stone house of eighteen rooms, for the accommodation of the officers of the company; cost \$6,000.

Among the building permits recently issued are the following, which contemplate an expenditure of \$5,000, or upwards: O. B. Scoby, six two-story brick dwellings, 48 by 100 feet; cost \$15,000. B. D. Chambers, eight one-story brick dwellings, 22 by 44 feet; cost \$15,000. C. A. Deane, four two-story brick dwellings; cost \$31,000. Mrs. M. C. Heaton, two-story brick dwelling, 30 by 50 feet; cost \$6,000. B. Berry, two-story brick dwelling, 52 by 61 feet; cost \$5,500. F. H. Lamar, two-story and basement, brick and stone dwelling, 50 by 65 feet; cost \$12,000. Denver Tramway Co., two-story brick building, 150 by 150 feet; cost \$35,000. Joseph Metzler, four two-story brick dwellings, 25 by 42 feet; cost \$12,000. Joseph Metzler, two-story brick building, 95 by 200 feet; cost \$55,000. Chas. Knoch, two-story brick and stone dwelling, 43 by 65 feet; cost \$8,000. Shapleigh & Hayes, two one-story brick dwellings, 22 by 40 feet; cost \$5,000. S. T. Sopris, two-story brick double dwelling, 64 by 64 feet; cost \$15,000. J. A. Pomeroy, two-story brick dwelling, 32 by 38 feet; cost \$5,000. A. Lewin, two-story brick building, 40 by 62 feet; cost \$10,000. E. K. Cobb, three-story brick building, 25 by 100 feet; cost \$10,000. Geo. W. Currier, two-story brick building; cost \$5,000. Ada E. Jones, three dwellings, 22 by 35 feet; cost \$10,000. Mary S. Farncourt, two-story brick building, 58 by 58 feet; cost \$10,000. J. A. McMurtrie, two two-story brick dwellings; cost \$12,000. W. H. H. Cramer, two-story brick dwelling, 28 by 73 feet; cost \$6,000. Chas. Butterfahs, two-story brick building, 44 by 75 feet; cost \$6,500. B. F. Lilley, brick dwelling, 23 by 42 feet; cost \$5,000.

Detroit, Mich.—Architects Pond & Pond, of Chicago, report: For Ashley Pond, two-story brick and stone double dwelling, 46 by 66 feet, slate roof; cost \$14,500; A. Chapaton, builder.

Architects Donaldson & Meier report: For Detroit Fire Department, two-story brick and stone engine-house, 50 by 85 feet; cost \$12,400; Topping & Fischer builders. Two-story brick and stone engine-house, 50 by 88 feet, slate roof; cost \$12,086; Topping & Fischer, builders. For Henry Minster, two-story brick and stone double dwelling, 43 by 54 feet; cost \$5,000; Durst & Wood, builders.

Architect J. W. Coughlin reports: For C. P. Collins, two-story brick and stone double dwelling, 40 by 60 feet; cost \$5,000; Henry Schubel, builder.

Architect Mortimer L. Smith reports: For Catherine E. Barnard, five three-story brick and stone dwellings, 100 by 76 feet; cost \$23,000; A. Chapaton, Jr., builder. For William Flynn, two-story brick and stone dwelling, 24 by 56 feet, slate roof; cost \$3,000; F. Julien & Co., builders.

Architects Mason & Rice report: For F. E. Robinson, two-story brick and stone dwelling, 36 by 40 feet; cost \$4,000; Henry George & Son, builders. For A. P. Platt, three-story brick and stone dwelling, 43 by 65 feet; cost \$16,000; Martin School & Sons, builders. For Harper Hospital, two two-story brick and stone wards, 45 by 50 feet, slate roof; cost \$10,085; Dean Bros., builders. For M. E. Society, two-story frame church building, 52 by 56 feet; cost \$4,500; Alfred L. Lewis, builder.

F. B. Whitman is building for the Peninsular Brewing Company two-story brick and stone barn, 38 by 92 feet; cost \$4,380.

Architect A. E. French reports: For James Coon, three two-story brick and stone stores, 73 by 66 feet; cost \$9,200; Clark, Vinton & Co., builders.

Architect Leon Coquard reports: For Arthur Gore, two-story frame dwelling, 24 by 60 feet; cost \$2,400; F. Julien & Co., builders.

Architect Peter Diederichs, Jr., reports: For John Wortmann, two-story brick and stone store building, 25 by 60 feet; cost \$4,500; John Schrage, builder.

Architect A. C. Varney reports: For Johnson Optical Company, four-story brick and stone factory building, 44 by 69 feet; cost \$12,000; W. H. Holland & Son, builders. For C. H. Mitchell, two-story brick and stone dwelling, 36 by 54 feet, slate roof; cost \$7,500; Bunting & Dwigman, builders.

Architect E. W. Arnold reports: For Jeremiah Connor, two-story brick and stone double dwelling, 40 by 62 feet; cost \$6,500. Also, two-story frame store building, 36 by 52 feet; cost \$3,500.

Architect William E. Higginbotham reports: For John E. King, two-story brick and stone dwelling, 49 by 75 feet; cost \$20,000; Bunting & Sigmond, builders.

During the month of June permits were issued for 225 new buildings, to cost \$342,789. Alterations, 67; cost \$43,460. Total cost \$386,249.

A. S. Sherwood is building a two-story brick and stone dwelling, 33 by 60 feet, cost \$6,000.

R. J. Wilson is building, for William Stocking, a two-story frame dwelling, 30 by 52 feet; cost \$4,000.

Architect J. W. Coughlin reports: For R. Donaldson, two two-story brick and stone dwellings, 24 by 58 feet; cost \$7,500; F. P. Williams, builder.

Duluth, Minn.—Architect A. F. Rudolph reports: Present condition rather dull, but prospects for fall better. Have in hand the following work: For Dr. C. A. Stewart, two-story brick building, 32 by 50 feet; cost \$7,000; foundation in; Stock & Fitzgerald, builders. For E. W. Markell, two-story frame, 28 by 36 feet; cost \$4,000; under way; foundation in; Lindbaum & Anderson, builders. For W. F. Marvin, two-story frame, 32 by 34 feet; cost \$3,000; Shaw & Thornton, builders. For Wallace Warner, two-story frame, 28 by 50 feet; cost \$5,000; contract not let. For T. W. Lennox, two-story frame, 28 by 52 feet; cost \$5,000; contract not let.

Fort Madison, Iowa.—Architect I. C. Wykoff reports: For John Troga, brick store and flats, 26 by 101 feet. For Mr. Case, two frame cottages. For Street Railway Co., frame car barns, 60 by 101 feet. For J. T. Bixley, frame store and flats, 25 by 50 feet. For Mrs. Keel, brick store and flats. For Mrs. Hesser, frame double tenement, 33 by 48 feet. For J. H. Duffus, brick and stone hotel, 48 by 125 feet. For Mr. Kretzinger, frame dwelling, 27 by 48 feet. For Mr. Gimmet, frame dwelling, 33 by 34 feet.

Garden City, Kan.—Architect J. C. Craig reports: Outlook at present not very flattering, owing to poor crops. For J. R. Holmes, two-story and basement brick residence, 60 by 85 feet; cost \$25,000; Steede & Pyle, builders. For Capt. J. J. Munger, two-story frame residence; cost \$4,000; under way; day work. For Will

Callahan, brick and stone business block, 25 by 80 feet; cost \$10,000; plans finished. For Charles Cockron, frame cottage, 30 by 40 feet; cost \$1,500; plans made. "Sentinel" building, four-story iron front business block, 25 by 116 feet; cost \$20,000; plans ready.

Kansas City, Mo.—Architect A. B. Cross has prepared plans for E. Harris for a three-story store and flat building, 270 by 50 feet; cost about \$80,000. For W. O. Thomas, two-story brick and stone store and flat building, 42 by 52 feet; cost about \$7,000.

Architects Van Brunt & Howe: For M. Mumford, block of three-story brick and stone dwellings, 224 by 40 feet; cost \$80,000.

Plans have been prepared for the Belt Line passenger depot, 38 by 100 feet, three stories high, brick, stone and terra-cotta; cost \$50,000.

Among the permits recently issued are the following, contemplating an expenditure of \$5,000 or upwards. James Moore, two-story brick residence, 26 by 60 feet; cost \$5,000. East Fifth Street Railway Co., one-story brick building, 89 by 120 feet; cost \$6,000. Theodore Stegner, two-story brick residence, 45 by 55 feet; cost \$15,000. Kansas City Gas Co., addition to gas works; cost \$6,700. A. Chadwick, block of ten three-story dwellings, 234 by 80 feet; cost \$70,000. James A. McCleary, block of four two-story brick dwellings, 42 by 56 feet; cost \$11,500. Louis George, two three-story brick dwellings, 41 by 52 feet; cost \$10,000. J. F. Marks, two two-story brick dwellings, 33 by 54 feet; cost \$14,000. T. Scannon, two-story brick business building, 30 by 76 feet; cost \$6,000. W. A. Kelly, six frame dwellings; cost \$9,000. Phil. E. Chappel, two-story brick dwelling, 42 by 64 feet; cost \$12,000. Langston Bacon, four-story brick business block, 50 by 105 feet; cost \$25,000. T. C. Van Wyck, two-story brick business building, 107 by 60 feet; cost \$13,000. J. W. Keeler, three-story brick business building, 50 by 73 feet; cost \$8,000. A. Artmaier, two-story brick business building, 25 by 75 feet; cost \$6,000. W. M. Masters, three-story brick business building, 50 by 60 feet; cost \$9,000. H. E. Henwood, four-story brick business building, 49 by 100 feet; cost \$30,000. L. C. Kranthoff, two-story brick business building, 42 by 60 feet; cost \$15,000. M. J. Banton, frame dwelling, 24 by 48 feet; cost \$5,900. T. G. Bracking, two-story brick stores and tenements, 123 by 43 feet; cost \$10,500. J. H. Whitehead, three two-story frame dwellings, 20 by 50 feet; cost \$8,400. W. M. Osborn, eight frame dwellings, 24 by 40 feet; cost \$22,400. Anne E. Sutton, four frame dwellings, 23 by 40 feet; cost \$6,400. P. R. Stevens, three frame dwellings; cost \$6,000. A. J. King, five two-story frame dwellings; cost \$5,000. A. J. King, six two-story frame dwellings; cost \$9,000. University of Kansas City, three-story brick college building; cost \$11,000. J. Franklyn, two two-story brick dwellings, 40 by 44 feet; cost \$5,000. Thomas Reilly, brick business block; cost \$14,000. Missouri Valley Investment Co., three two-story brick business buildings, 100 by 50 feet; cost \$8,750. Samuel Freeman, three-story brick residence; cost \$7,000.

A summary of the amount of building done the first six months of 1888 shows that there were 2,700 permits issued, contemplating an expenditure of \$5,112,482. For the same time in 1887 it showed 2,479 permits; cost \$5,234,926.

Kansas, Ill.—Architect W. H. Milner, of Bloomington and Peoria, reports: For the school board, schoolhouse, to cost \$10,000; projected.

Lafayette, Ind.—Architect James F. Alexander has prepared plans for a building to cost \$25,000. Also a college building to cost \$9,000.

Lamar, Col.—Architect J. C. Craig, of Garden City, Kan., reports: For hotel company, two-story and basement brick hotel, 40 by 100 feet; cost \$12,000; under way; day work.

Manitou, Col.—Architects Barber & Pease, of Colorado Springs, have completed plans for the new school building, which will be started as soon as bonds can be disposed of.

Nashville, Tenn.—Architect Geo. W. Thompson, for B. F. Wilson, three-story brick store building; cost \$12,000.

Architect Wm. C. Smith: For Vanderbilt University School of Mechanical Engineering; building to cost \$20,000. Hughes & Rives builders.

Architect R. R. McGinnis: For Dr. Price, addition to school building; cost \$14,000. Simmons & Phillips, contractors.

Peoria, Ill.—Architects Burnham & Root, of Chicago, have prepared plans for Mr. Wilson for a brick residence to cost \$15,000.

Peoria, Ill.—Architect W. H. Milner reports: Building outlook good. All mechanics are busy. Stonecutters and bricklayers are in demand. There is such a call for new and good materials that we are about to start a permanent exhibit in connection with my office. Have the following work in hand: For W. H. Ballance, two-and-one-half-story brick, stone and frame residence, 50 by 52 feet; cost \$12,000; under way; James Bramble, builder. For Jacob Woolner, three-story brick and stone residence, 90 by 102 feet; cost \$50,000; under way; day work. For O. J. Bailey, frame dwelling, 40 by 52 feet, also barn; cost \$7,000; under way; day work. For J. M. Morse, frame dwelling, 32 by 40 feet; cost \$3,000; projected. For S. B. Hazard, frame dwelling, 36 by 50 feet, also brick barn, 30 by 36 feet; cost \$7,000; under way; W. H. Coleman builder. For Wm. Francis, stone and shingle residence, 52 by 48 feet; cost \$10,000; under way; Joseph Miller & Sons, builders. For Wm. McLean, brick and stone residence, 52 by 54 feet; cost \$15,000; John Coleman, builder. For John Wyand, brick and frame residence, 36 by 50 feet; cost \$8,000; John Coleman, builder. For John Francis, frame residence, 72 by 90 feet; cost \$18,000; under way; Joseph Miller & Sons, builders. For Dr. Adams, three-story brick sanitarium, 40 by 60 feet; cost \$8,000; projected.

Pueblo, Col.—Architects Adler & Sullivan, of Chicago, Ill., are preparing plans for a four-story stone opera house and office building, 120 by 190 feet, seating capacity of auditorium, 1,000; cost of building, \$200,000.

Richmond, Ind.—Architect W. S. Kaufman has prepared plans for a school-house, to cost \$25,000.

Architect S. O. Yates has prepared plans for a building, to cost \$14,000.

Roaring Springs, Pa.—Architect W. L. Plack, of Altoona, reports: Brick hotel building, to cost \$15,000; contracts not let.

Rockford, Ill.—Architect J. L. Silsbee, of Chicago, has prepared plans for the new Christian Union church; cost \$22,000.

Salida, Cal.—The Salida Opera House Association will erect an opera house, Masonic hall and store building, 75 by 40 feet, and 50 by 75 feet, two stories high; seating capacity of opera house, 600. E. W. Corbin and Frank Churcher are the building committee.

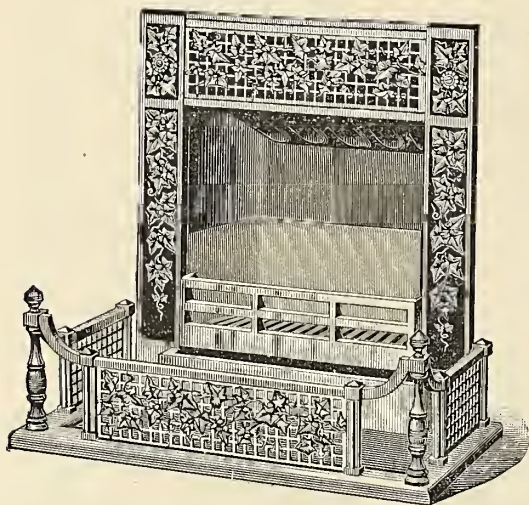
Savannah, Ga.—The Savannah, Florida & Western Railroad Co. have commenced work on their new passenger depot.

The plans of Architect Wm. B. Preston, of Boston, have been selected for a new hotel to be erected on the site of the old United States barracks; estimated cost \$200,000; no contracts let.

Sterling, Ill.—The city is taking bids on the new city hall building, to cost \$40,000. Plans were prepared last winter by Architect William W. Clay, of Chicago.

Topeka, Kan.—Architect J. G. Haskell has prepared plans for Col. Geo. W. Veale for a three-story store and office building, 100 feet front, to be built of Colorado red sandstone; cost \$35,000. For Thompson Bros., block similar to the above, 50 feet front; cost \$18,000.

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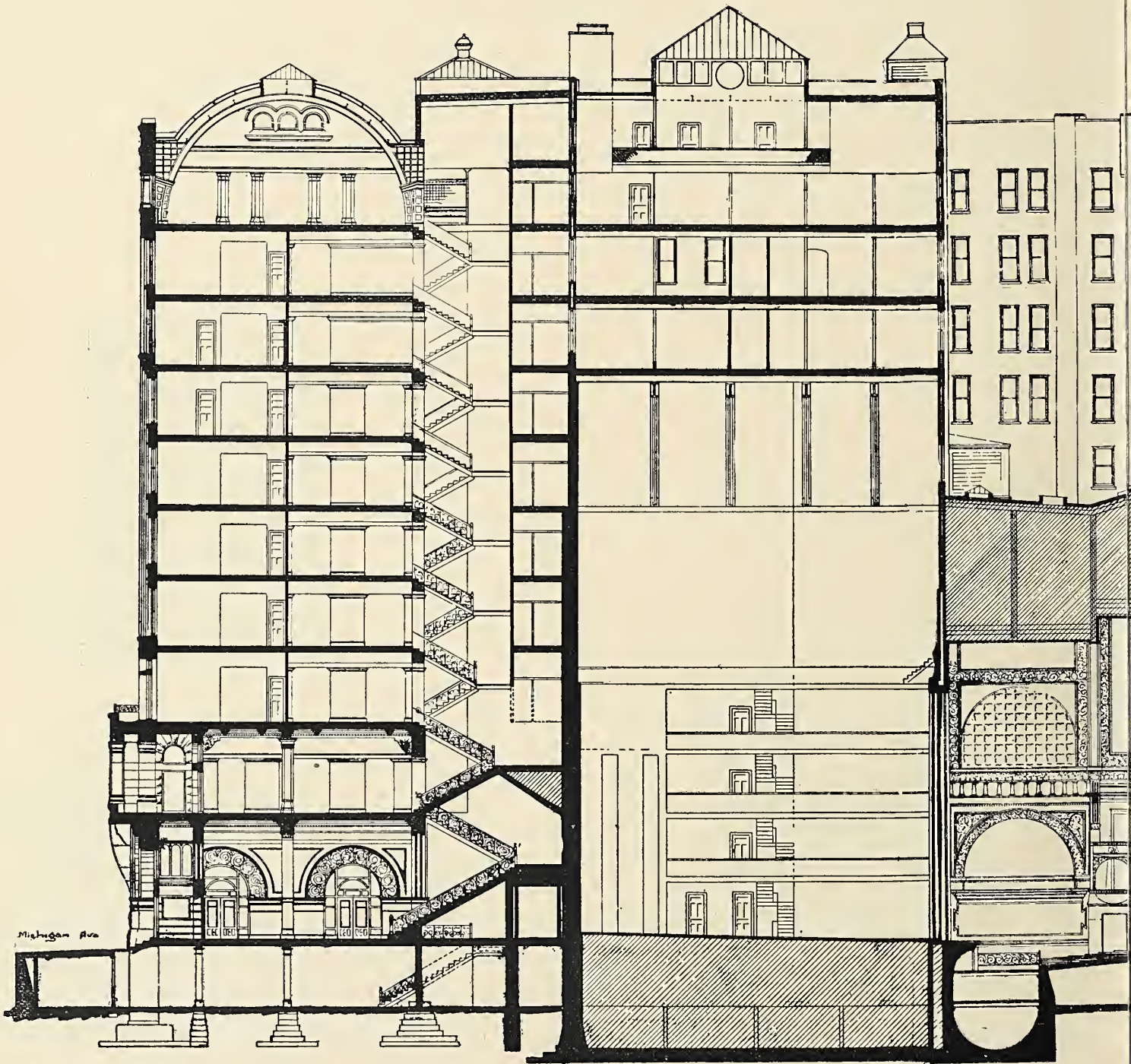
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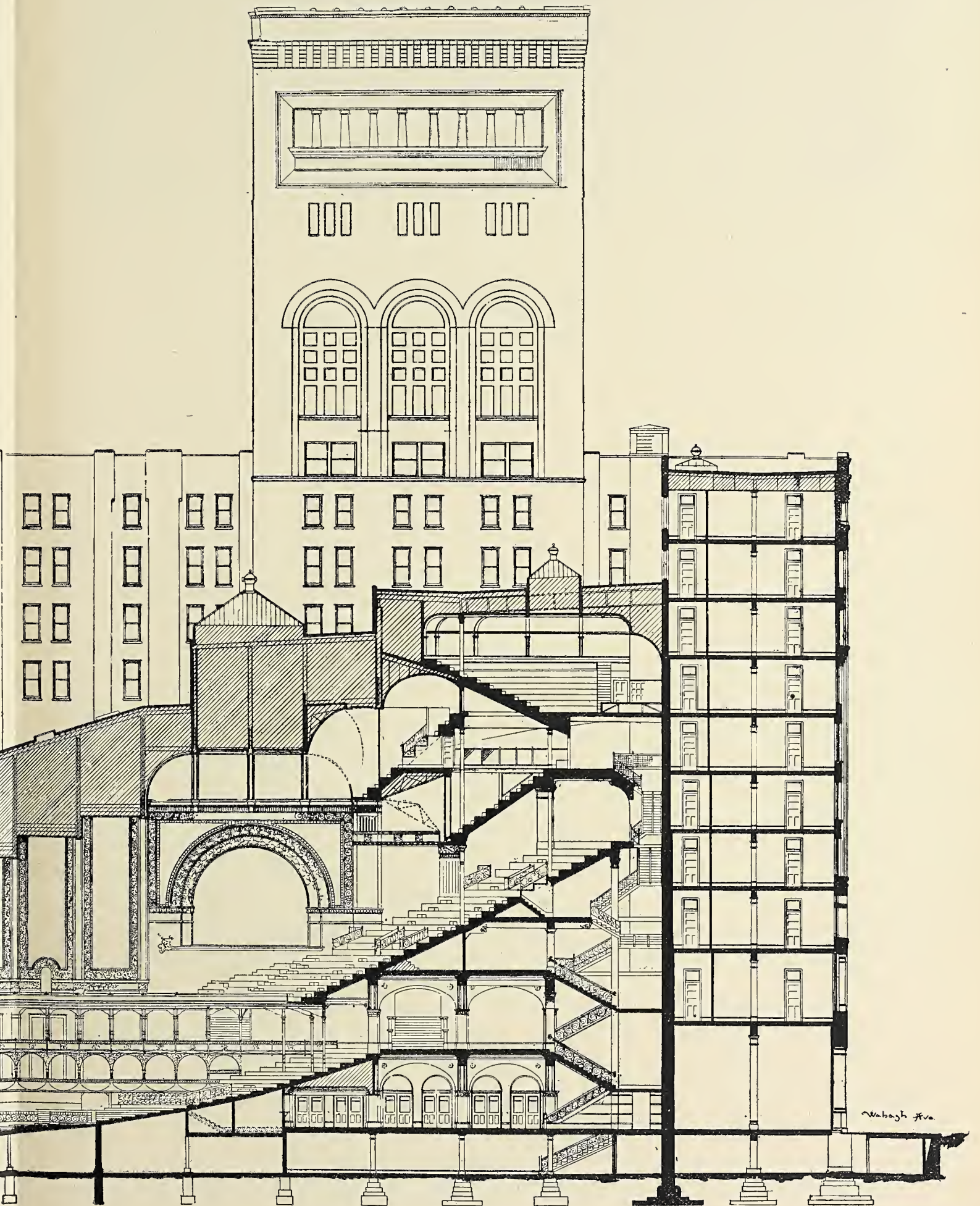
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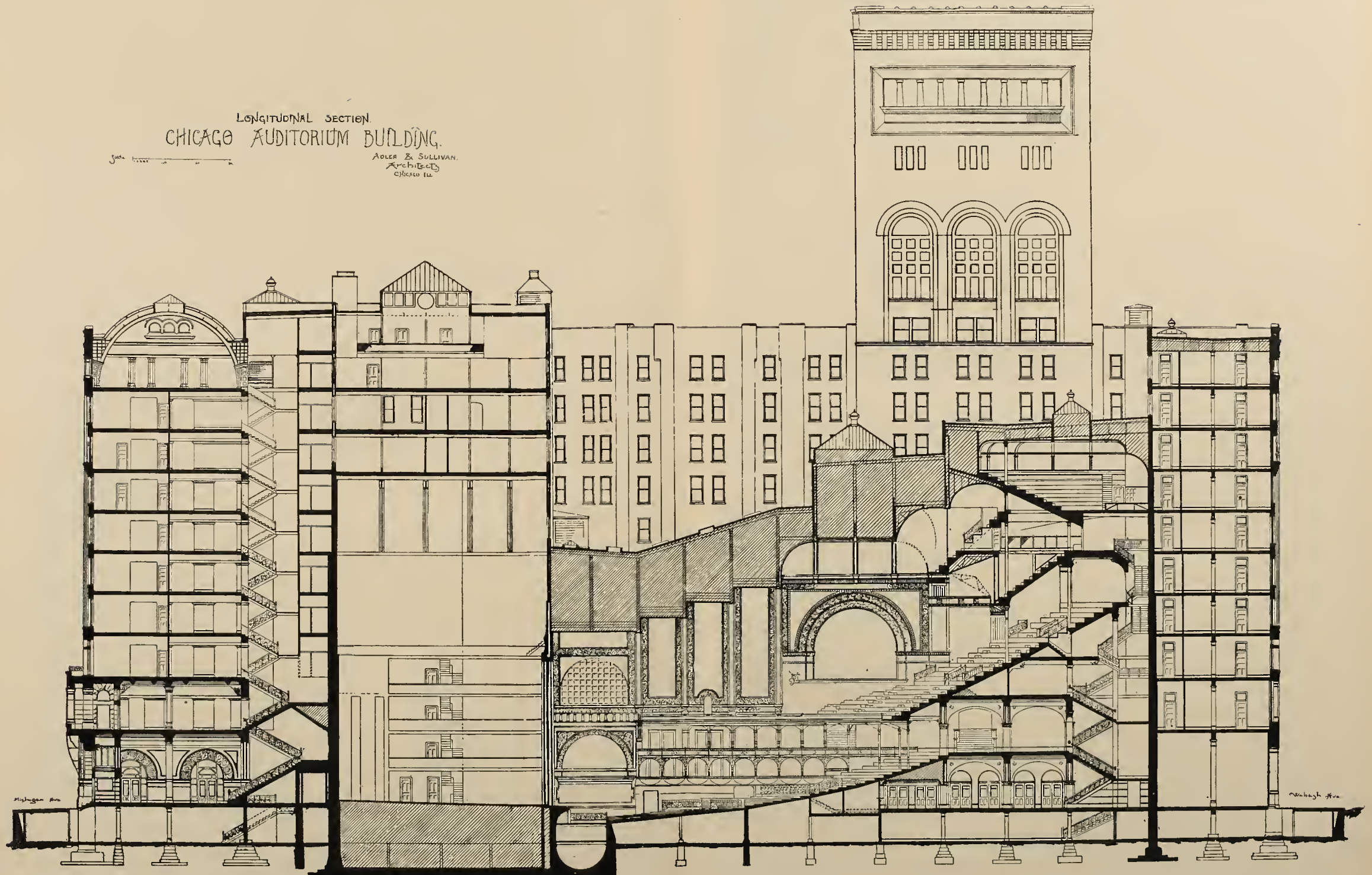




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CHICAGO, JULY, 1888.

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CONTRACTORS ON THE ROOKERY OFFICE BUILDING.

The Rookery Building, Chicago.

THE Rookery building, illustrated in this number, magnificently built as it is, includes several materials and appliances that can be specially mentioned as being the best that modern art can produce.

The terra cotta, which attracts every observer through its artistic modeling and harmonious blending with the brickwork, was produced and placed by the Northwestern Terra-Cotta Works, of Chicago.

The extraordinary evenness and smoothness of the plastering calls for comment, and the contractor, Joseph Eastman, of Chicago, is deserving of great credit for its perfection.

The ornamental ironwork, of which the interior views give a general idea, and which includes much that is finished by the Bower-Barff process, is, perhaps, the finest exhibit of ornamental ironwork in any office building in the country.

The electric lighting was placed by Leonard & Izard, the general agents for the Edison United Manufacturing Company, and is said to be the largest and handsomest electric light plant in the world.

The hardware was manufactured from special designs by the Yale & Towne Manufacturing Company, of Stamford, Connecticut, and was placed by Orr & Lockett, of Chicago. The exterior fittings are all in Bower-Barffed iron, and, in general completeness, shows in one more instance how perfect are the facilities of these manufacturers, and the dealers as well, for the carrying out of so extensive a contract, facilities enjoyed to an extent superior to all other concerns in the United States.

Hall's Safe and Lock Company have completed the contract for all the large number of safe and vault doors in the Rookery building, and the work, in finish and strength, is a model of security and beauty.

No other feature in a first-class office building has become so real a necessity as the Cutler mail chute. Like the elevator, it makes a high building not only practical, but convenient. The chute in the Rookery building is a particularly fine sample of the Cutler patent.

The Worthington pumping machinery in the Rookery building consists of four compound pumping engines, and three high-pressure pumps, with a total capacity of 13,500,000 gallons of water in twenty-four hours, which would be sufficient for a city of 140,000 inhabitants.

JOSEPH EASTMAN,

THE contractor for the plastering of this building, was selected by the owners on account of his reputation for energy and push, and as usual he has given entire satisfaction. His experience as a bidder has been peculiar. Often when there has been only two bids on a job, the other bid was more than double his figures. Once he was \$60,000 lower than the next bid on a job of plastering, and once the highest bid was three and one-half times above his own. This is only liable to occur, however, when the work bid on is extraordinary and unusual.

Mr. John McCreery, chairman of the Illinois State House Commissioners, said of him: "I never saw a man like Eastman; you cannot give him anything, and he won't steal. If I had \$75,000 worth of plastering to let, I would give it to him and go away and leave it."

Mr. W. W. Boyington wrote of him that: "I consider him a first-class mechanic. He can give a bond to any amount, and his word is as good as his bond."

Mr. M. E. Bell said: "I consider Eastman one of the best contractors in this country. During the time I was supervising architect he had more contracts with the government than any other one man, and we had less trouble with him, although he is a low bidder."

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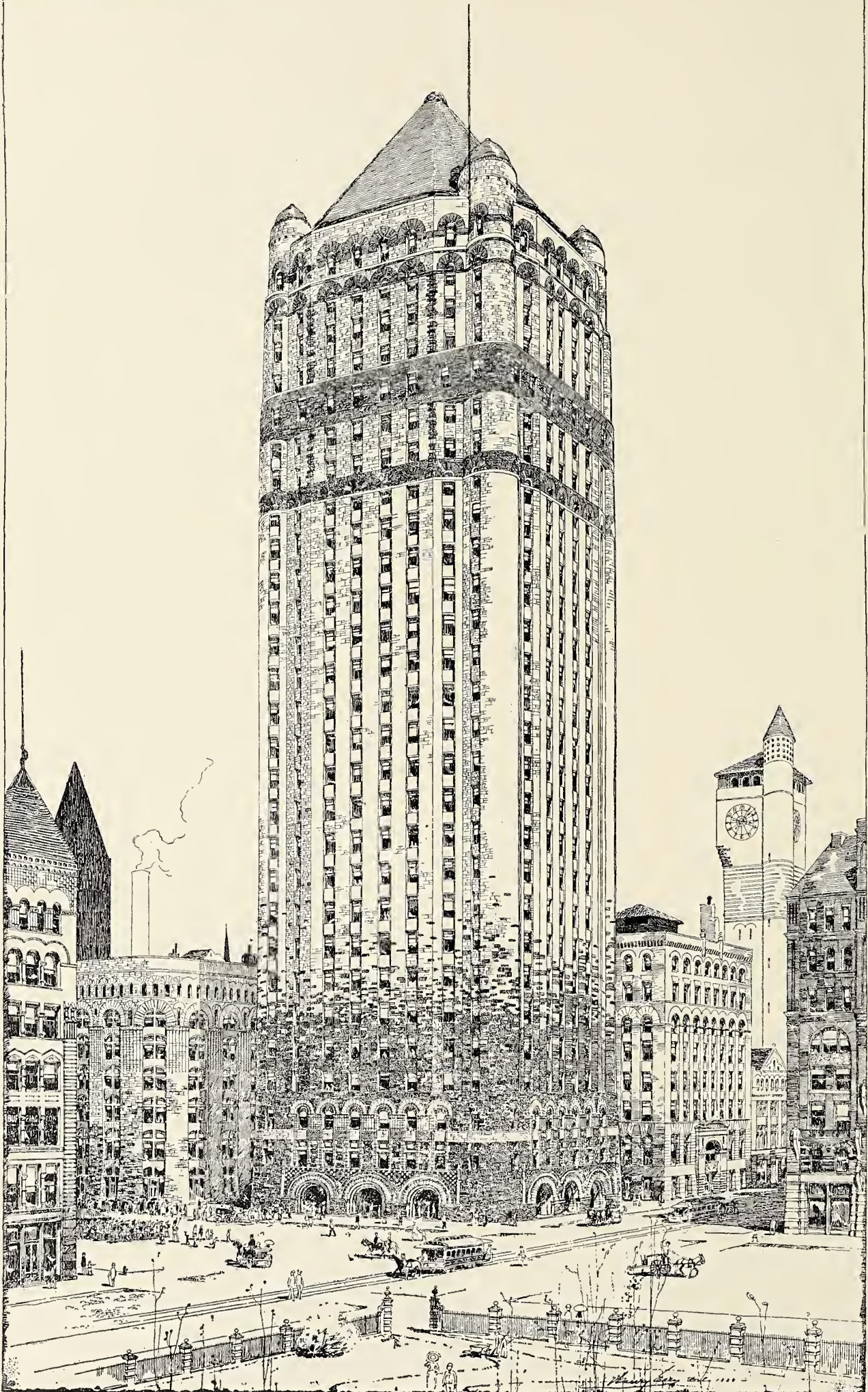
See Illustration of La Salle Street Vestibule.



THE ROOKERY OFFICE BUILDING, CHICAGO.

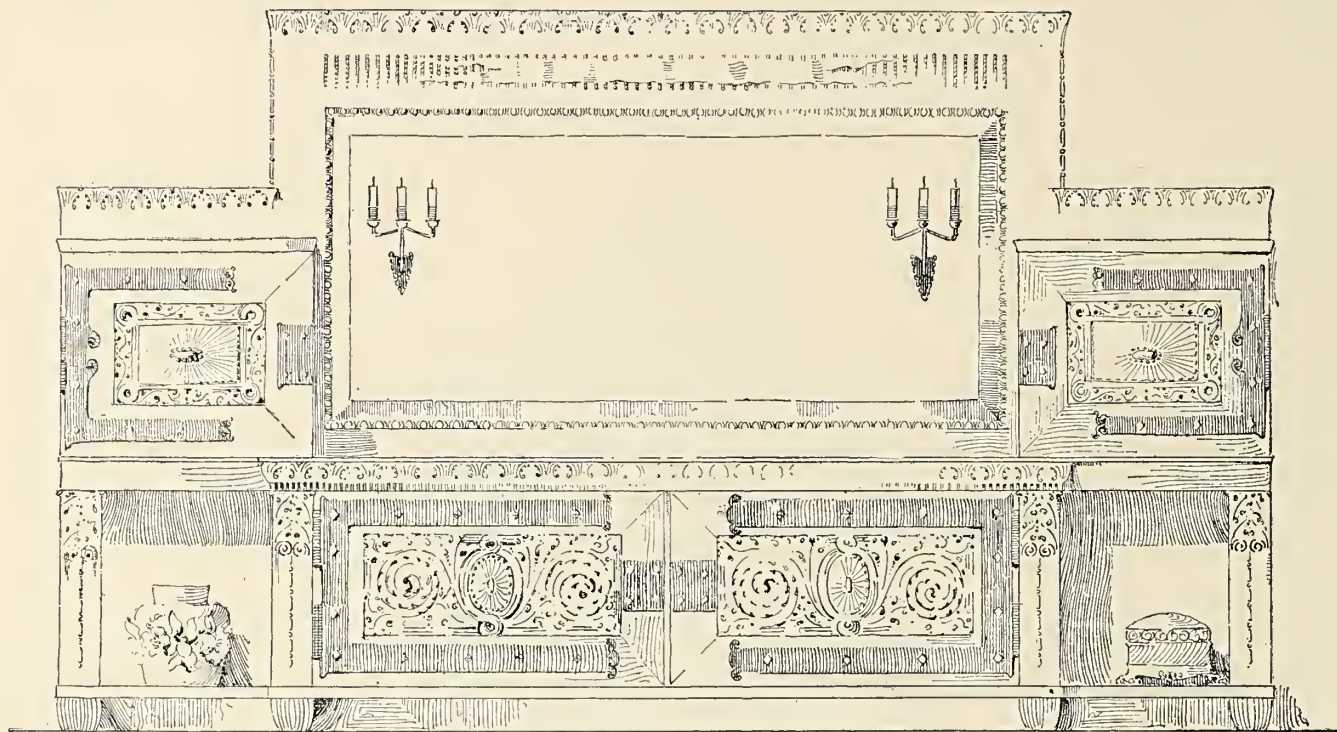
BURNHAM & ROOT, ARCHITECTS.

L. S. BUFFINGTON, ARCHITECT
MINNEAPOLIS, MINN. / 1888.



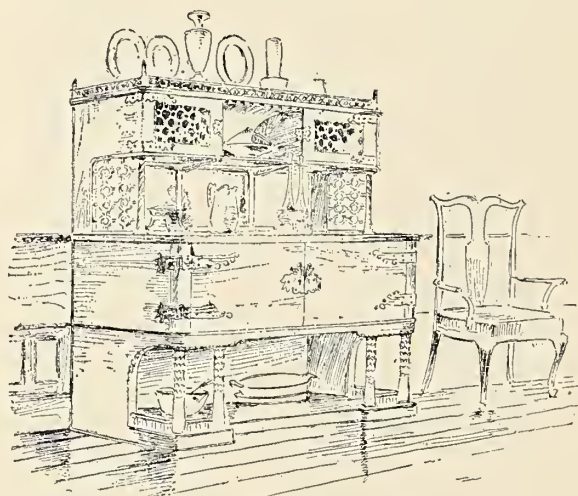
DESIGN FOR TWENTY-EIGHT STORY OFFICE BUILDING—IRON CONSTRUCTION.

L. S. BUFFINGTON, ARCHITECT.

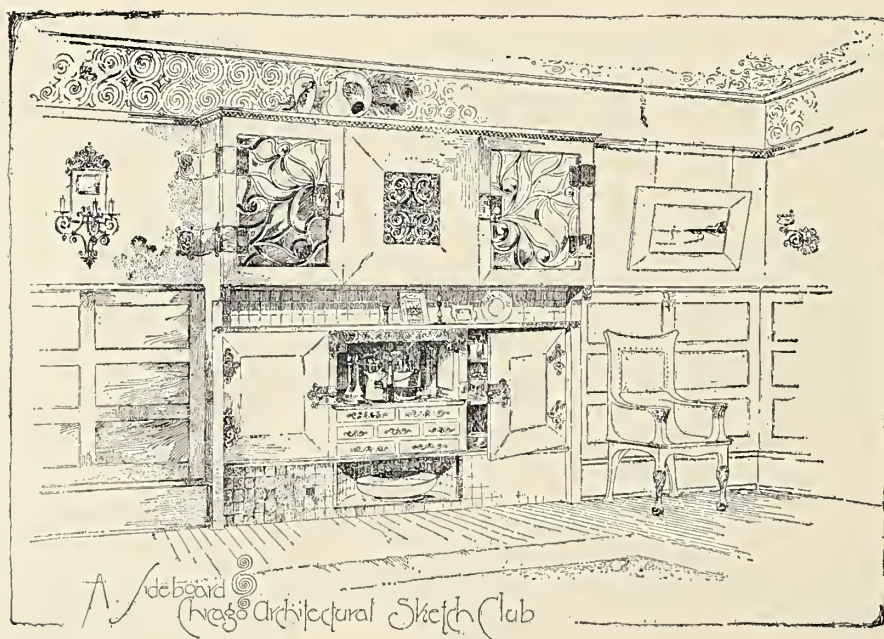


FIRST PLACE—T. O. FRAENKEL.

T.O.F

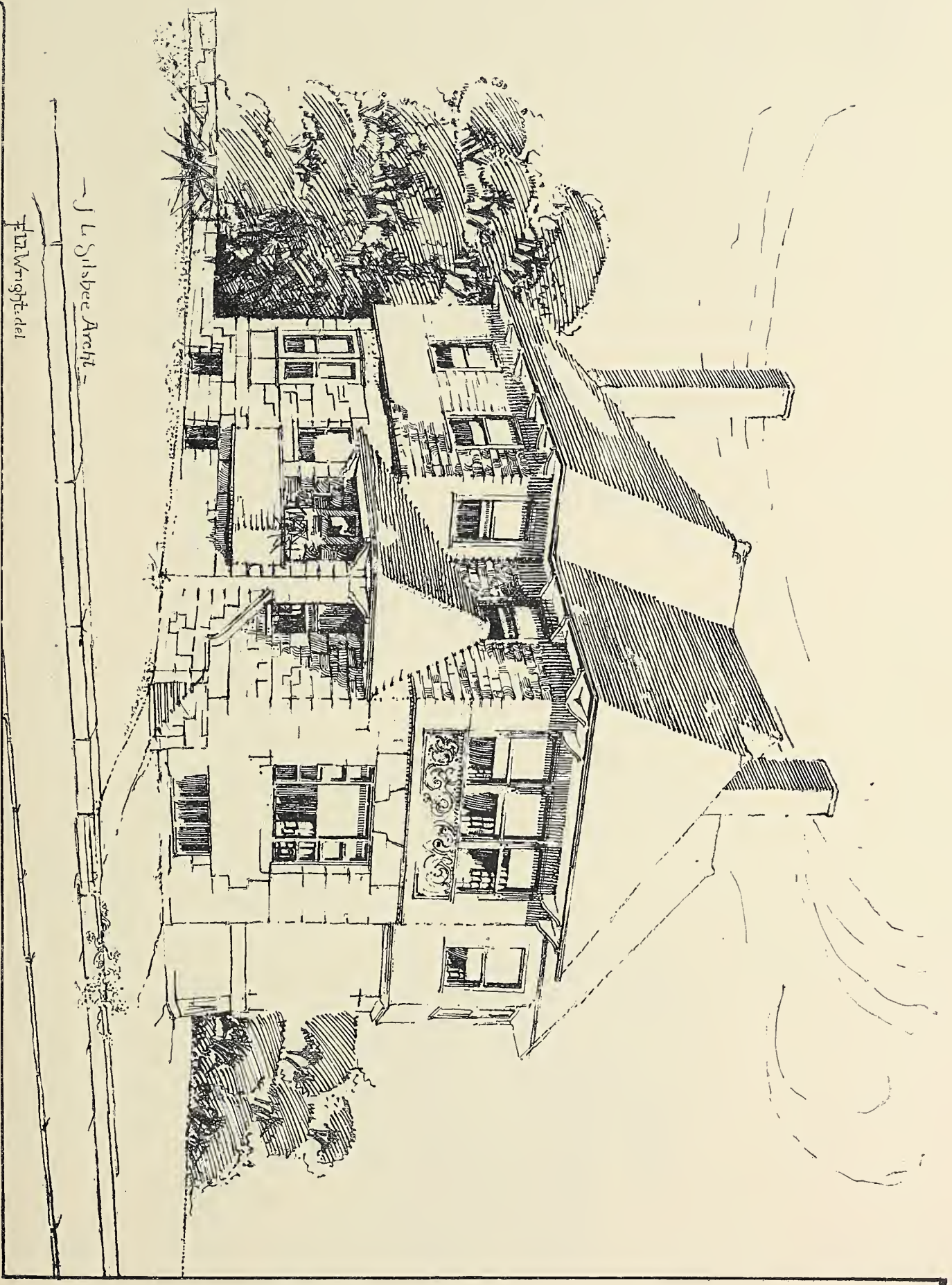


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THIRD PLACE—W. B. MUNDIE.

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ARCHITECT DANKMAR ADLER, of the firm of Adler & Sullivan, architects of the Chicago Auditorium building, is en route to Europe, and will visit the principal cities on the continent. Mr. Adler, besides being one of the leading members of the profession in the United States, is a past-president and one of the most active members of the Western Association of Architects, and also a member of the American Institute of Architects. Members of the profession in Europe will be glad to meet Mr. Adler, though his work will not permit of a prolonged stay on the other side of the Atlantic.

THE Association of Ohio Architects will hold its third annual meeting at Cleveland, on Thursday, August 16, and will spend a day on the lake and at the Put-in-Bay islands. The following notice has been issued by the secretary:

The third annual meeting of the Association of Ohio Architects will be held at the Stillman Hotel, Euclid avenue, Cleveland, August 16, 1888.
The meeting will be called to order for the transaction of business at eight o'clock p.m. (On account of the expressed desire of many visiting architects to enjoy an excursion to the Put-in-Bay islands, the meeting has been postponed to this hour, the steamer City of Cleveland arriving from Put-in-Bay about seven o'clock.) Supper will be served immediately after the meeting. Headquarters at the hotel will be open throughout the day.
The steamer City of Cleveland leaves Thursday morning at 9 a.m., The Pearl, every day at 8.30 a.m. (City time 33 minutes faster than standard.) Steamers run from Toledo and Sandusky to Put-in-Bay daily.
The Executive Committee will meet during the day previous to the meeting.
CLEVELAND, Ohio, August 7, 1888. F. A. COBURN, Secretary.

Every member of the association should be in attendance as, though this is a midsummer meeting, and enjoyment and relaxation will form a large part of the programme, it must not be forgotten that matters of the utmost importance to the profession in the state will be considered and acted upon, and it is the duty of every member to lend to these his best judgment and active coöperation.

THE Twenty-Second Annual Convention of the American Institute of Architects will be held at Buffalo, beginning October 17, according to a preliminary notice, issued by Emlen T. Little and A. J. Bloor, the committee of arrangements. The members are requested to inform the committee if it is their intention to present papers upon any professional subject, and if they will expect to send any drawings for exhibition. Calling attention thus early to the expected exhibit of architectural drawings is timely, as it will give every member ample opportunity to prepare to be represented in what should be the grandest exhibition of professional art yet presented by the Institute, and members can be assured that any drawings sent to Buffalo will be properly cared for and exhibited in an appropriate place. A decision thus early in the year upon a place of meeting and a general outline of the proceedings sent forth by the committee of arrangements is a good omen for the success of this convention, and no better city than Buffalo could be selected, though every city would be proud to welcome the Institute. It will be well for architects, who have presumably more time during the summer solstice to contemplate matters foreign to the every-day grind, to review the proceedings of the last convention and give some thought to those matters that will come before the next for action. Probably the most important will be upon the motion offered by D. H. Burnham, relative to a consolidation of architectural associations. The arguments advanced by Mr. Burnham, in his paper upon the subject read before the last convention, should be carefully considered, and each member should be prepared to consider the advisability from every standpoint. The value of architectural

association is increasing every year, and nothing should be done to retard or hinder the usefulness of any, while everything should be done to foster and advance the growth and power of all. There are several other important measures to come before the meeting which we would earnestly recommend members to study carefully in order that the meeting may be in every way beneficial to the profession.

HENRY IVES COBB, of the firm of Cobb & Frost, architects, of Chicago, has been appointed architect of what will be known as the Newberry Library. Some years ago Walter C. Newberry, with a public spirit equaled by few in this country, left in trust an estate to be devoted to the building of a library for the people of Chicago. This has now accumulated to the sum of five or six millions of dollars, and the trustees propose to erect a building that will cost at least three million dollars. The library will probably be many years in process of completion, but a portion will be finished at once. Mr. Cobb was appointed architect, his fee being according to the association schedule, five per cent of the final cost; the trustees stipulating that he devote his entire time to the work, except as they may consent to his being engaged upon other work. This will necessitate the dissolution of the partnership, which will take effect upon January 1, at which time, also, Mr. Cobb commences active work. He will design the building complete before construction is commenced. That Chicago will have a library only second to the congressional library in this country is a matter for public congratulation, while the profession will be glad to see one of their number honored by so important a commission. The important bearing this appointment has upon professional practice in general is referred to in another paragraph.

WE hail as an indication of progress, in the relations of the architectural profession to the public, the action of the trustees of the Newberry Library, at Chicago, in selecting an architect for the proposed new library building without resort to a "competition." Their action, following so closely upon the adoption of a similar policy by the directors of the Chicago Auditorium Association, is an indication of the final recognition by thinking men of that constant competition in which architects are engaged in their daily practice by their emulation of each other and their striving after the highest attainable standard in actually executed work; and it shows that there are representative business men who realize of how little value are the pictures represented in a "competition," of how little value is a judgment based chiefly upon such pictures. It proves to the members of the architectural profession, that honest, diligent and intelligent effort expended upon the current work entrusted to them by their clients may give a standing and reputation of greater value than the efforts expended upon the making of pictures and plausible prospectuses to be submitted in "competitions."

IT is an indication that a high professional standing attained after years of honorable practice may possess a commercial value surpassing that of a corps of perspective and watercolor artists and prospectus writers; and it is particularly encouraging that in the cases referred to, men still in the prime of life have been selected, showing thereby that a record good enough to secure the best public work may be made by comparatively young men, thus weakening the force of the argument so often made in favor of "competitions," to the effect that without them only the oldest men in the profession would secure the prizes of professional practice. It needs no argument to prove that a very young man, with

little or no experience in the actual erection of buildings, is not well qualified to take charge of an important building; that the probable conduct of such work should not be awarded to him until he has given evidence, by the methods employed and the results obtained in the administration of the smaller work first entrusted to him, that he possesses the qualifications essential for the discharge of the most important trusts. But the instances herein cited show that it is not necessary that the young architect should become aged and fossilized before he can demonstrate to his contemporaries his fitness for accomplishing great results, and to show that he possesses qualities of a high order, claiming favorable consideration when the great prizes of professional practice are awarded.

THE administrators of the buildings before referred to and the public at large are to be congratulated upon the substitution, for the usual utter irresponsibility so characteristic of the ordinary "competition," of a degree of personal responsibility of the architects to their immediate clients and to the public at large, which could not have been attained under the "competition" system. Many architects would have participated in the competitions for these two structures had the "competition" method been employed as a means of determining the selection of an architect, and the entire business public would have suffered a loss in the diffusion of the energies of so many architects upon these competitive plans for two of the great prizes of the age. These energies have now been conserved and expended upon the actual work of these architects, which, for their own gain, for the good of the clients, and for the advantage of the community, has thus been greatly bettered in its quality.

AN example of the utter unsatisfactoriness of the architectural "competition," as ordinarily conducted, is the case of the Congressional Library, referred to in our last issue. Here, awards of *three* consecutive architectural "competitions" for the same building, *all* made in favor of the design of the *same architect*, became, when put into execution, unsatisfactory to the successors of those who made the first selection, who now propose a fourth competition, which, if determined upon and entered into, as we hope it will never be, may again result in the selection of a plan, perhaps even the plan of this same architect—but as soon as another congress shall have been elected, there will be again dissatisfaction which will probably increase until there is still another competition, and so on, ad infinitum. We refer to this matter in this issue, with the purpose of placing the members of the profession on their guard against giving countenance to the proposition for another competition for this building, and to warn them that this will bear dead-sea fruit, even to him who may be successful in this proposed fourth competition. We bid them remember that they, of all citizens, should not aid and abet the perfidious repudiation of the obligations of the government to one of their number, as contemplated by the action of the House of Representatives of the fiftieth congress toward the architect of the Congressional Library Building.

THE hope of securing the doubtful honor of being selected architect of this building should induce no member of the profession to forget that the government of the United States must be taught that even architects have rights which that government is bound to respect; that the repudiation by the government of its obligations, based upon the awards made by it in three consecutive competitions, covering a space of thirteen years, is not a means of inducing or persuading men of high professional standing to again enter the lists

and take the chances of being treated by the fifty-first or the fifty-second or the fifty-third, or any other congress, as the fiftieth congress proposes to treat the author of the plans approved by the thirty-fourth and the thirty-seventh congresses, and the architect selected and appointed by the forty-eighth congress. Mr. Smithmeyer has become, through the action of the thirty-fourth, the thirty-seventh and the forty-eighth congresses of the United States, the representative of the architectural profession of his country. If the thrice-repeated action of the government of the United States is not to be considered binding upon that government in its dealings with a member of the architectural profession, then it may be assumed that an architect has no rights which the government of the United States is bound to respect.

IN rallying to the support of Mr. Smithmeyer in this instance the architects of the United States do battle for their own support. It is Smithmeyer today; it may be Post, or Burnham, or McKim, or Peabody, or McLaughlin, or Adler, or McArthur, or Freret, or Van Brunt, or any other of the many architects of this country tomorrow. The members of a profession who do not see in so flagrant a trespass upon the rights of one a menace to all are not worthy of recognition as citizens of this republic, who as a body are the masters of their servants, the members of the congress of the United States. The cry of jobbery raised in the fiftieth congress against the victor in the competitions decided by the thirty-fourth, thirty-seventh and forty-eighth congresses may be raised with equal right and with equal justice against the victor in any subsequent competition. The argument made in the fiftieth congress, that the architect, in whose buildings the cost of the whole is greater than that of any of its parts, is unworthy of confidence and has no rights which the government is bound to respect, may, if permitted to be put forth unrebuked by the architectural profession, be propounded again and again, until the architect in the employ of the government of the United States has lost all claims to recognition among honorable members of honorable professions.

AMONG the important events of the recent convention of French architects in Paris, was a visit to the immense St. Lazare railway depot, now being erected in that city under the superintendence of M. Lisch. This edifice will be heated by steam conducted in cast-iron pipes, inclosed in hollow brick partition walls which, through radiation, become themselves reservoirs of heat, and contribute materially toward warming the rooms and corridors. As an extra precaution, hot-air registers are provided, opening into these hollow spaces, but thus far there has been no occasion to open them. Toilet arrangements after the American system, with sewer connections, also baggage-car elevators and subterranean communications, are mentioned. A "Terminus Hotel" adjoining the depot, and connecting with it, is another innovation. From the St. Lazare depot the architects went to the Louvre, to listen to an eloquent address by M. Dieulafoy on the art treasures lately obtained by him from Scisa, and to inspect this interesting collection. Thence, proceeding to the terra-cotta gallery, they were favored with a somewhat elaborate dissertation by M. Pottier, on ceramics. M. Pottier traced the architectural use of terra-cotta to a remote antiquity. The Greeks employed it freely for acroteria, gargoyles, antefixal and even for pediments, numerous fragments of which have been unearthed at Olympus, Elatea, and elsewhere. The Louvre possesses a large collection of antique vases, friezes, cornices, etc., found in Sicily, Italy, Greece and

Etruria. He thinks the use of color in stone architecture originated in polychromatic terra-cotta, that wooden architecture was the prototype that the transition to stone was gradual, and through the intermediate use of terra-cotta, which in the form of roofing tiles and of cornices was employed first on wooden buildings; that this terra-cotta was ornamented with painting, and that when stone was substituted for it the same colors were applied to the stone which had been used on the terra-cotta. In confirmation of this novel theory, he remarks that the color effects were sought only on stone friezes and cornices, precisely those parts where in the primitive wooden edifices terra-cotta had been employed. This view is as interesting as it is original, and, from the high reputation of its author, merits a thoughtful reception.

RESUMING our account of the recent convention of French architects in Paris, published in the July number, Wednesday began with a visit to the new Russian church in that city, under the guidance of M. Sauffroy, architect. The plan is in the familiar form of the Greek cross: the principal divisions are the vestibule, the nave and sanctuary, which latter is partitioned off by a carved wooden screen. A central cupola crowns the nave, with side cupolas over the transepts. Externally a huge gilded pyramid surmounts the edifice, with a bulbous dome and cross at its summit. At each of the principal angles rise other pyramids similar to the central one, but smaller. Leaving the Russian church, the architects visited a sumptuous private residence designed by M. Sedille, vice-president of the *Société Centrale des Architectes*, who has made liberal use of colored marble, mosaics, and encaustic tiles for decoration. Among the appointments named are doors of bronze and of wrought iron, carved wooden mantels and *elevators*. In the afternoon, the sculpture gallery in the palace of the Trocadéro was visited, to view the large and splendid collection there gathered, and to listen to an address by Prof. Courajod on French sculpture, which elicited frequent applause. The day closed with a visit to the Cambodgien museum and an interesting explanation by M. Roux, secretary of the *Société Centrale*. On Thursday there was an excursion to Orleans, under special guidance of Mr. Charles Narmand, an account of which is promised in a later issue of *La Semaine des Constructeurs*. Friday morning was devoted to the distribution of medals of honor awarded by the society. This ceremony was presided over by M. Lockroy, minister of public instruction and of the fine arts. There was also a report and discussion of the Mutual Defense Fund (*Caisse de défense mutuelle*), of which, at this date, we have no details. On Saturday, under the direction of M. Alphand, the architects visited the buildings now being erected for the grand *Exposition Universelle* of 1889. Their visit terminated at the Eiffel Tower, now nearly three hundred feet high, where M. Eiffel himself was in waiting to receive them. In the afternoon of Saturday the closing session was held in the school of fine arts, when several papers were read, and discussions followed. The traditional banquet took place the same evening at the Continental Hotel. There were numerous toasts, and, among others, a witty speech by M. Dieulafoy, who had been interviewed, he said, by Apollo, and was commissioned to state that the gods on Olympus were utterly unable to conceive why two bodies of men so exceedingly alike in their qualifications, tastes and occupations, as architects and engineers, must persist in standing aloof from each other, when both could be so much more useful, prosperous and happy if they would unite their fortunes and join in one common professional organization. Among the stranger architects present is mentioned Mr. Hooper, laureate of the Royal Institute of British Architects.

Boston Sketches—Old Work.

BY C. H. BLACKALL.

THE changes wrought by time, and more especially by the hand of man, have caused the city of Boston to assume a very different aspect, and, indeed, in many respects a different character from what it possessed in the earlier days of its history. At the time of the Revolution the city was built upon a peninsula, and the old name of Tremont or Tri-mont reminds us that the city was perched upon three comparatively lofty hills, two of which have almost entirely disappeared. The outline map alone can give any adequate idea of how widely the water front has been extended, and how completely the city has lost its peninsula character. Possibly one of these days the genius of enterprise may extend still further, and the Charles river, once the delight of Holmes and Longfellow, may be confined in narrow banks instead of roaming over a wide Back Bay as it did once. It is very easy to see that Boston has lost its distinctly Bostonian character; that is to say, the modern city does not present, in any marked respect, the character which won for it an individual rank among the cities of this country some two or three generations ago. Even Beacon Hill, synonymous with Boston's best and most conservative growth, has ceased to be the acme of social and literary habitation, and in moving down onto the uninteresting level district of the Back Bay, it may certainly be questioned if the last connection between the old and new has not been completely cast off.

But, notwithstanding these changes, Boston possesses something which hardly another city in the country can claim; it has a decided architectural past, relics of which may be found in several portions of the city in fairly good preservation, and interesting both for themselves and their associations. During the days of the Revolution the part of the city which is now designated as the North End contained the finest residences and was the most favored locality, Copp's Hill, with its burying ground, and the tall spire of the old North church being the central point of the then existing wealth and culture. Now, the North End is the lowest and most disreputable part of the city, in some respects, and Salem street is given over to second-hand dealers of Israelitish descent, and Milanese street brawlers; while almost all that remains to recall the good things of the past are the old burying ground and the old North church, which is so aptly described in the "lonely and spectral and sombre and still" words of Longfellow, though as seen today the church is anything but lonely in appearance. One can but feel sad to realize how the glory of that part of the city has departed. We said that the church and burying-ground were all that remained, but there are fragmentary bits here and there: an old porch, a bit of iron gateway, a half-defaced column, a curious dormer, and occasionally, down some dirty, deserted alley-way, one can find an unexpected bit of colonial elegance, or catch a glimpse of a fine old stairway in a tumble-down house. The very names of the streets recall the old days: Prince street, Hill, Charter, Endicott, all are names which are associated with the Boston of history. The interior of the North church, also, with its English aspect, its stiff, high pews inclosed by doors, and its general air of sturdy respectability, is a token of the decayed gentility which once claimed Copp's Hill for its focus.

We can judge a little of what the North End might have been in its palmy days by a portion of the region on Beacon Hill. Beacon street runs along the farther side of the common, and retains a few fine old houses, simple and stately in outline, with very little pretence to show or display, but with an intrinsic character which can easily account for the tenacity with which the Boston mind has clung to the old types, even in the newer houses which have been erected farther down the street and on Commonwealth avenue. And yet even here we see that the old has lost its hold on the hearts of the people. There is a fine, granite-faced, deep-porch residence at the corner of a cross street leading from the common, one of those delightful old city mansions such as are found only in Boston, which are simple without being monotonous, and rich and inviting without unnecessary display or ostentation; and yet the people who own such houses as this, are building themselves large showy mansions down on the made land of the Back Bay, in the midst of the half-covered marsh which the present generation has skated over in its youth. It seems too bad to turn from such delightful old houses and seek by preference the garnished modern dwellings on one of the most uncomfortable streets which a large city ever deliberately planned; and, yet after all, there are many reasons why the colonial work should be neglected. Few of the old houses would be entirely satisfactory to live in, however pleasing they may be from an æsthetic standpoint, or however charming they might appear to the artist and architect.

Immediately behind Beacon street, and parallel to it, is Mount Vernon street, a thoroughfare which in some respects retains its ancient character better than any other in the city. Here and there down its short extent are scattered a few delightful old houses, tree-embowered, colonial, wide,

picturesque, and charming; too good to disturb, and yet not good enough, in the eyes of the present generation, to live in.

On the brow of Beacon Hill, facing the common and looking out over the whole city, is Boston's pride and delight, the State House, with its noble colonnade rising above the steep street like an acropolis, crowned with its many-hued, indescent, electro-gilt dome; the mark for all the country round of the city which is set on a hill and has no intention of hiding its light. The State House and the common are the two boasts of Massachusetts, and rightly so, for where is there a more noble park and more interesting surroundings; the dome on one corner, the long street of mansions, club houses and historic buildings on one side opposed to the Boylston and Tremont street rows of business blocks, with the graceful spire of the Park street church adjoining the two extremes of business and residences. The appearance of the corner toward the Park street church was once even more interesting than it is now, until some church committee in a fit of misguided enthusiasm daubed the fine, old spire with a sad hue of paint instead of leaving it in the clear, sharp-cut white which so well fitted its colonial character.

Just beyond the Park street church, along Tremont street, is King's chapel, the sturdy, conservative, dumpy-towered little church which has held its own so bravely during these many centuries, and has preserved its character and almost its form of worship intact, even though the property has been successively occupied and owned by different denominations. The interior of King's chapel is especially good. There is some excellent woodwork, finely detailed, carefully designed, and executed in a spirit which stamps it as one of the best colonial productions remaining in the city. The exterior of the church is simple, quaint, and odd. Long acquaintance has made it seem the proper thing for the place, and has woven about it a charm which goes well with the proximity of the old graveyard and with its neighbor, the stately Tremont House; but, after all, the chief architectural charm of King's chapel is hidden away inside.

Another interesting group of old work is along State street, the scene of the Boston massacre, now the very center of the financial heart-throbs of the city from which has flowed so many millions, north, south, east and west to aid in the building of the republic. At the head of the street is the Old State House, a nondescript brick structure, its very oddity and incongruity doubtless being the chief reason for its preservation. On the southern front, looking down State street, is a curious Dutch gable crowned with figures of the lion and the unicorn, which some patriotically disposed American citizen of Irish descent recently attempted to wrest from their places, on the assumption that the city of Boston could ill comport such direct allusions to royal prerogatives. Over the center of the State House is a beautiful cupola in the best style of the colonial work; and the interior of the building, while simple and unadorned in the main, has a beautiful central staircase with a profusion of the twisted turnings so dear to the lover of colonial work. Close by is Faneuil Hall, the cradle of American liberty, but associated in most Boston minds with the butchers and market men who inhabit the lower story, though its glorious share in the liberties of our country is not quite forgotten, and the upper hall is still today, as it was in the times of the early republic, a place for free town meetings and popular demonstrations.

Not so old as Faneuil Hall, but of almost equal architectural interest, is the old postoffice building on State street, now occupied partly by the stock exchange and partly by numerous offices. The front of this building is a fair imitation of the order of the temple of Apollo Didymus, and the oldest inhabitants tell some wonderful stories of the huge monolithic granite columns, requiring untold yokes of oxen and innumerable horses to drag them from their native beds at Quincy. Unfortunately the old postoffice will soon be a thing of the past. It is to be torn down some time within the coming year to make way for a magnificent stock exchange and office building; and, unless some public-spirited individual buys the old front outright and preserves it as a memorial of what our fathers did when they became interested, one of the finest pieces of old stonework in the city will entirely disappear.

We said at the beginning of this paper that Boston had changed from its early aspect, that it was no longer colonial and revolutionary in its aspect either as to sentiments, or much less as to its architecture. The statement might be carried still further. Boston is still changing in its character, more rapidly, perhaps, than any city in the country.

What the old Puritan city of Boston is finally coming to we know not. It will surely need to be practically rebuilt some time during the next half century, possibly even sooner; for the conservatism which has held on so long to the old styles and old ways, when once loosened, may produce almost anything. We can only hope that the new movement may result in at least a measure of the simplicity, the mother of all true art, which has made the old work so interesting, and which has given it a value for all time.

The Cincinnati Centennial.

BY LAWRENCE MENDENHALL.

Continued.

A VISIT to the Centennial is, like a good story well told, worthy of repetition, for there has never been held in the West any exposition that is so replete with objects of interest. The person who will grumble over not having enough to see, surely can't live, and if there breathes a man with soul so dead, he is simply a fastidious wretch and worthy of having "a six-days' go-as-you please" attack of nightmare.

In your walks in every direction you are not only greeted with beautiful exhibits, but happy faces, indicative that pleasure is holding full sway.

One of the most interesting counterfeits of old-time structures is that of Fort Washington, built in 1789, in the style common to block-houses, in which beauty and grace give place to strength. I was almost afraid (and in fact did not) to give a war-whoop for fear that a file of soldiers would sally forth and answer it with a volley of lead pills. In the same building are the following exhibits that are worthy of mention and are known to the profession everywhere: American Meter Co., city; Vogt Stone Co., Massillon, Ohio; Casparis & Neeb, Lancaster, Ohio; Buena Vista Stone Co., city; Martin and Barris, Cleveland, beautiful woods, and E. D. Albro & Co., city, same material.

In the home of those celebrated Venetian "birds," the gondolas, Machinery Hall, built by Messrs. Carter & Goldkamp, city, is found a very complete display of wood-working machinery, made by the Geo. A. Gray Co. and the Egan Co., of Cincinnati, and Greenlee Bros. & Co., Chicago. Philip Carey & Co., Cincinnati, make a fine display of asbestos. The Pecora Paint Co. have applied for space, and will make a beautiful display.

While the bridge spanning Elm street and connecting the Music Hall with Park building is called the "Bridge of Sighs," it does not connect with any dungeons like its Venetian namesake. It is a most excellent place to view the beautiful illuminations, the street being lined for two squares with arches emitting bright gas jets, toned down by different colored globes.

In the government exhibit is shown plaster casts of the mud and stone huts occupied by the Zuni and Pueblo Indians. How such habitations, so entirely devoid of sanitary arrangements or home comforts, could ever be the place of the down-sitting and uprising of human beings is a mystery. The *burglar-proof sash lock* is a needless and unknown article here. The architectural photographs (three by five feet) of the different government buildings are beautiful, and admirably illustrate the progress made in photography since Daguerre made public his invention in 1839.

I do wish that space would allow a fuller description of what can be seen here; but it is an impossibility.

The James L. Haven Co., city, and the Warner Elevator Co., make a practical display of their elevators in carrying people to the second floor. In the Canadian display is one of terra-cotta, made by the Hynes Terra-Cotta Co., of Toronto, Canada. Although the color is a little light, yet the molding is quite clear, and the designs artistic. In the Technical School room is a good display of the same material, made by W. H. Perot, Baltimore, Maryland.

In my last letter I simply alluded to the architectural drawings and the Technical School display, and now I will try to enlarge. In the latter department, which is quite full, the following schools exhibit their work, namely: New York Trade School, plumbing, especially fine; Cleveland Training School, molding, carving, and drawing, very fine; Chicago Manual Training School, a most excellent display of molds, drawings, and castings; Rose Polytechnic Institute, Terre Haute, Indiana, a magnificent display of mechanics and engineering practice; Cincinnati Manual Training School, a display of drawings, carvings, castings, etc., that attract universal attention. In this connection I am sorry to say the superintendent, Mr. George R. Carothers, is going to leave the city for New York.

It is a matter for regret that the display of architectural drawings, as an exhibit, is not large, and a friendly criticism leads me to say that *all* the contributors did not extend their fame by their contributions.

William Martin Aiken, city, among other designs, exhibits a sketch in color for a city residence which has many good points architecturally, its style being Flemish in treatment.

Louis M. Wood, Kansas City, presents a sketch in India ink of the A. O. U. W. Temple, at Kansas City.

John Moser, of Atlanta, Georgia, has a well-drawn and beautifully colored perspective of a problem in building a United States revenue building; space, light and strength being the main factors.

Samuel Hannaford & Sons, city, exhibit several beautifully colored perspectives, among them being the Vigo City, Indiana, Court House; Cincinnati Chamber of Commerce, and new City Hall.

The sketch submitted by Nier & Byran, of Kansas City, for a chamber of commerce, is quite original in treatment, but the whole plan is too heavy.

One of the best pen and ink perspectives in the exhibition, is one shown by E. O. Fallis, of Toledo, of the Hotel Victory, at Put-in-Bay, Ohio.

The same architect, in connection with J. W. Yost, of Columbus, has a bird's-eye view sketch of the State Insane Asylum, at Toledo. Charles Crapsey and W. R. Brown, city, have some fine and artistic work on exhibition, many of their plans having been honored by THE INLAND ARCHITECT by publication. They also show some fine interior photographs. The space allowed did not admit of the pictures being hung as they should have been, and many fine efforts are almost lost to view. It is unfortunate that the watercolors of architects like A. O. Elzner and W. W. Franklin should labor under this disadvantage.

J. W. McLaughlin's Carnegie Library design justly occupies a good position, as does also H. E. Siter's Bank Building.

S. E. Des Jardins has several fine perspectives, both in colors and ink.

If in my strolls and descriptions I have omitted anything or anybody, I make an humble public apology, at the same time thanking my readers for their patience. In these letters I have confined myself of a necessity to building materials and architecture, and if through my descriptions a faint glimmer of the glories of the Centennial of the Ohio Valley and Central States has been caught, I lay down my pen with a satisfaction akin to joy.

Decoration.*

BY PROFESSOR G. AITCHISON, A. R. A.

AMONG the ancient Greeks and the Northern Italians of Renaissance days, beauty was adored. Every man who practised a craft was as sure of fame if he followed what we now call a humble one as if he followed a noble one, provided that the articles he made could be endowed with beauty, and that he possessed a certain high degree of excellence. A carpenter, an armorer, a potter, a goldsmith, a lapidary, or a bronzist, was as certain to be famous as a sculptor, a statuary, a painter, or an architect. We naturally know less about the ancient Greeks than about the Italians, though, from Socrates being a sculptor, we hear something of the crafts, and we know that Phidias was not only a sculptor and statuary (and I use the word statuary in its proper sense as a worker in bronze), but worked also in ivory and gold. The great Italian artists were almost invariably craftsmen as well, in fact, had begun as craftsmen, and had learned during their apprenticeship precision in the use of tools and in workmanship, as well as precision in drawing and modeling. As a rule, every youth who wanted to be a painter, sculptor, or architect, was apprenticed to a goldsmith. Brunelleschi, Michael Angelo, and Benvenuto Cellini were all brought up as goldsmiths; one became an architect, one a sculptor and painter, and one a statuary and die sinker; Ghirlandaio got his name from the golden wreaths he made, and Francia, as you may see in the National Gallery, signs his pictures as a goldsmith, while he signed his goldsmith's work as a painter, and, like the French artists of the present day, these artist-craftsmen were often excellent shots and swordsmen as well. One of the absurd things in the present day is the looking down on craftsmanship; a real craftsman can always do something well. If he can invest the article he works at with the highest form of beauty, he is just as much an artist as he who paints a picture, models a statue, or designs a building.

The best definition of fine art I ever found is in Mr. Ruskin's lecture (2nd Oxford lecture, 1870). "Every art being properly called 'fine' which demands the exercise of the full faculties of heart and intellect."

To those who have the passion for color that some have for music, beautiful colored glass offers the same feast to the eye as exquisite music does to the ear, and from the fact of glass being transparent it does not appear like a tangible object, but, when lit by the sun, it looks like gems melted into light that bring all heaven before our eyes, and surrounding objects are suffused with its divine harmonies. I think I may say it is the only visual art in which man can emulate, if not excel, Nature. In pure loveliness of many colors it exceeds in beauty the rainbow, or the sunset, and appears as if some divine affluence had come from heaven to entrance us. It defies the painter's brush and the poet's pen, though we cannot help feeling that Shelley was the poet most highly sensitive to the rapture produced by the glory of colored light. In his description of fire he shows an appreciation of the beauty we meet with in stained glass, and did not merely use it as a foil to music:

"Men scarcely know how beautiful fire is,
Each flame of it is as a precious stone
Dissolved in ever-moving light, and this
Belongs to each and all who gaze upon."
("The Witch of Atlas," stanza 27.)

Milton's "Storied windows richly dight" only give a flavor to his enjoyment of music:

"There let the pealing organ blow
To the full-voiced choir below
In service high and anthems clear,
As may with sweetness through mine ear,
Dissolve me into ecstasies,
And bring all heaven before mine eyes."

The poet laureate uses it in the same way:

"And thunder-music, rolling, shake
The prophets blazon'd on the panes."

This rapture is only produced by a few specimens of stained glass, mostly of the 11th or 12th centuries; though perhaps some of the windows of the cathedral at Florence are almost as lovely as those of Chartres, or

*Extract from the third lecture of the Cantor series, delivered before the Society of Arts, London, May 14, 1888.

the aisle windows of the choir at Canterbury. Next to them are some of the Saracen windows; these seem to have been copied in plaster from the pierced marble ones of St. Sophia, and from the fact of the substance of the window slabs being thick, and the edges of the opening being splayed, you can infinitely vary the effect by moving into different positions. Some most love the suffused light on the splays, but to me the effect is most lovely when I get the bulk of this reflected color with gleams of the glass through which the sun streams, making them look like different colored stars in a halo of glory. Next to these full-toned windows in loveliness are those of fine old grisaille glass, especially when seen toward sunset, and when exposure has converted each quarry of white glass into mother-of-pearl.

A finely designed and finely executed gem is just as capable of raising the loftier emotions as a bronze statue or a marble bas-relief; and, speaking personally, I should be inclined to place the glazier's art next to the divine arts of poetry and eloquence, for like Timotheus' song, it has "raised a mortal to the skies."

The Cathedral of Poitiers has windows of grisaille, that I once saw just as the light was fading, and they made me ask myself if anything could be lovelier. After grisaille is some of that glazing which is only translucent, and has been done with onyx or marble, where one lovely pale tint fades into another, and then swells and fades again, "untwisting all the chains that tie the hidden soul of harmony." At San Miniato, Florence, the windows of the choir are glazed with slabs of pavonazzetto, and look like glorified tortoise-shell. Beside the genius and labor of man, Nature has lent her aid to produce these unsurpassable effects in old glass. She has, by roughening and eating into the surface of the glass, turned white into opal, and by partly overspreading them with dirt and lichen she has converted flat tints into cut jewels. Directly we get stained glass windows whose forms and colors we can calmly criticise and admire, they fall into the ordinary category of beautiful human works, and to me are far lower in the scale than those that, when illumined by the sun, seem but a shapeless mass of colored loveliness, which throw us into rapturous adoration, and seem as if they could not have been done by man, but that angels must have been sent from heaven to present us with them, so that we might be at once delighted and thankful.

When we attempt to copy the fine early stained glass, consisting of subjects to a small scale, we barely rise to respectable mediocrity. Supposing we have the old glass to copy from, the failure can only arise from one or more of these causes—want of skill, inferiority of material, or the effects of age. The want of skill I cannot speak to, though it is to be supposed. The old glass was mostly done by monks, who devoted their time and genius in this direction as the best service they could render God, and who, consequently, considered that no time, no labor, and no care was too great to make their offering worthy. Such a sentiment we cannot find now, and can barely understand. Perhaps I can throw some light on it by a story from "Greater Britain." It is acknowledged in America that no fruit growers can compare with the Shakers in the excellence of their fruit. The author asked one of them how they managed it; he said, "If you love the trees, you study them, and you find out what they like and dislike; some like shade, some like sunshine, some like beautiful flowers, some like perfumes. If you make them happy, they give better fruit."

Next, as to material. Scandalous as it is to confess, we are grossly inferior in that, and knowingly so. Any manufacturer of colored glass would tell you the fact in a moment; he would simply say, "it is not worth my while; make it worth my while and I will do it." And he might even add that, with all our chemical knowledge, and all our skill and appliances, he would undertake to make better glass than had ever been made before. I do not say he could, but he would thoroughly believe he could. Love and patient skill can achieve wonders. The earlier Indian gems were pierced only for a hair, and the instrument seems to have been a twig and some emery. And some of the most heavenly blues of early glass have never been equaled. Theophilus, a monk of the eleventh century, tells us that this blue glass was only to be got "in the ancient edifices of the pagans. Some small vases are also found * * * which the French * * * collect, and some melt the sapphire in their furnaces, adding to it a little clear and white glass, and make costly plates of sapphire, and very useful in windows. * * *

The Romans certainly had not our chemical knowledge or appliances, but they may have had greater pride in their skill, and greater skill.

The application of science tends to diminish skill, and the object of the manufacturer is to extinguish it. There is a trade proverb, that "No man can make his fortune who has to employ skilled labor." There are many other forms of colored glass than the full-colored; that in which the whole tone is light, and the variations in tone and tint are the slightest, is the most charming in effect, like those Italian low reliefs of the Quattrocentisti, where the highest part of the relief is not the eighth of an inch. There are, too, a thousand ways in which different sorts of colored glass can be introduced to give beauty to windows of every description, and in every variety of building.

Glass, too, offers us a field for recording reminiscences of fine form as well as of fine color; of form particularly when a window is placed where no direct sunlight comes on to it. Two or three things must always be considered when stained glass is used. You do not want highly colored painted decoration, nor that which is elaborately full of work, where deep-toned stained glass is used, this conjunction not only leaves no rest for the eye, but the color of the dead painting is spoiled by the colored rays. Nothing goes so well with the most magnificent full-toned stained glass as the greys of old stonework; next, you can no more leave a white window where the bulk are of fully colored glass than you can put up a white chimney-piece in a room decorated in a full tone; and, again, whatever be the tone of the chamber, if the wall decoration be full and elaborate you only want enough work on the glass to suggest intention. You must not suggest want of completion, but merely the studied absence of ornament to give effect to the elaborated parts. Greek work is absolutely perfect in this respect; it says to you, "My author did not leave me plain for want of industry and

skill, but because he considered by doing so he showed that highest skill, of knowing when and where to stop." In the best Saracen work a similar effect is got—though, in my opinion, a lower one—by gradation. All is ornamented, but in the general effect the lighter ornament appears as mere texture, if not as a plain surface. The Saracen does not take so lofty an intellectual position as the Greek, for he either mistrusts his own judgment or yours; by going close enough you can see he has worked, while the Greek says, "Raise yourself to my standard and you will then understand the value of this elaborate plainness."

There is one very common belief that is applicable to stained glass, as it is to all the arts that combine the useful and the fine; persons who cannot draw on paper think they can on glass, or on pottery, or on silk, and persons who are more or less color-blind think the same about color. If foremen of house-painters are not chosen for this defect their employers certainly look on it as a most pardonable weakness. I may add, too, that the art of drawing modeling, or designing form, by no means confers the gift of color on its possessor; many have this charming faculty of harmonizing color who cannot draw. In fact, the highest excellence in either, if not antagonistic to the other, is exclusive by predominance. The Tuscans were specially formists, while the Venetians were colorists. We should not go to Michael Angelo or Raphael for color, nor to Titian or Tintoret for form, though both schools are passable in the opposite gift. If a painter is not a colorist he should change his occupation, for if the color of his pictures is vile we do not look at them, while if the color is superb we may at least study the form.

I think we may claim a new departure in stained glass, for some of Mr. Burne Jones's windows in Oxford Cathedral are both new in treatment and beautiful as well. In one of Mr. Ruskin's lectures he confirms the theories I ventured to uphold in my first lecture. In speaking of the windows of Chartres, he says:—

We profess that this is to honor the Deity, or in other words, that it is pleasing to Him that we should delight our eyes with blue and golden colors. * * * I do not think it can be doubted that it is pleasing to Him when we do this, for He has Himself prepared for us, nearly every morning and evening, windows painted with divine art, in blue, and gold and vermillion; windows lighted from within by the lustre of that Heaven, which we may assume, at least with more certainty than any consecrated ground, to be one of His dwelling places.—(Oxford Lec., p. 8r.)

ENAMEL.

As the material of this is glass, I have joined it with stained glass. In the present day it does not greatly flourish; its most common form nowadays is like painting on china, and is called painters' enamel. There is a tradition that true enameling originated in Gaul, though the use of inlaying the precious metals with colored stones, colored mastics, and colored pottery was known to the Egyptians, and was in its effect very similar; just as the Chinese ornaments inlaid with the blue feathers of the jay's wing cannot at a little distance be distinguished from enamel. The three enamels known besides the painters' are called partitioned (*cloisonné*), dug out (*champlevé* or *in taillé d'épargne*) and translucent.

The old *cloisonné* had its center at Constantinople, and the ground and the partitions were of gold, into these colored glass was filled in powder, or mixed with a little gum water into paste, fused, and eventually rubbed down smooth, and polished. There was a great demand for this art in adorning personal ornaments, book covers, church plate, and altar fronts, but from the costliness of the material it was very dear. At Limoges they manufactured a cheap imitation, particularly for the larger objects; the spaces for the enamel were cut out of solid brass, copper or bronze, the enamel was treated as before, and the metal gilt. The translucent required the highest skill. The ground was mostly of burnished silver, on which the figures were engraved, and translucent enamel filled in of the requisite colors, or the whole plate was covered with enamel. To get the enamels of different colors to fuse at the same time, or in succession, as there were no divisions to retain the colors, required knowledge, experience, patience, and exquisite skill, for if the heat required to fuse one color was greater than to fuse another they were apt to mingle. In the sixteenth century in France, the taste for dug-out enamel almost ceased, and the glass painters of Limoges used copper plates, sometimes silvered, sometimes with tinsel fused on, and covered mainly with translucent enamel, for the plate and ornaments of sideboards, personal jewelry, etc.; this was gradually superseded by enamels in white, or light grey, on a black or dark blue ground; the early ones were touched up with gold lines and hatching, until this was superseded by mere china painting; the only difference being that, in the case of enamels, the ground was copper, thickly enameled in white, on which the painting was done.

The earlier Limoges enamels of the second period are very effective, and the larger specimens have been used as ornamental panels, and to adorn furniture, etc. I am happy to say that enameling for decorative purposes is again being introduced. [Some specimens exhibited.]

The arts of the carpenter and the potter are two of the oldest in the world. As soon as mankind wanted boiled food, they had to invent something to boil it in; though probably the process was inverted, and when they got something that would stand heat, and hold water they took to boiling their food. Shells were doubtless used as the first drinking cups by those living by the seaboard, and calabashes by those inland, and we still find gourd-shaped bottles, with the double bulb, in the pottery of the East. The hafts of weapons and tools were probably the first specimens of the carpenters' art; then came the carved club and the javelin, subsequently the canoe, so aptly called by the Americans a "dug out," and the paddle. Framed huts of wood must have been a late invention, and doors and shutters a still later one.

Nature always makes her works fitted for their end, and when she likes, and she mostly does like, perfectly beautiful as well. So long as mankind were in constant contact with Nature's works they tried to imitate her methods, but at last they discovered that this involved two processes. So that when they ceased to care for beauty they grudged the necessary labor to attain it. It is a million to one against a thing made by man, with no other end in view but utility, turning out beautiful.

Though ornamenting wood with incised or carved patterns was probably an early invention, it was no easy thing to mold it, hence the belief

* Theophilus lib. ii., cap. 12.

that the original Greek eaves of wood were first covered with ornamental terra-cotta, which was subsequently copied in stone. In speaking of woodwork it is necessary to describe the material, and the way of putting it together. The thickest tree trunk is rarely wide enough to make a door of the centre plank, and even if it were, it is apt to crack and twist as it gets dry; to get over these difficulties boards enough were laid side by side, and fastened together by planks on the back at right angles, but this shows a series of parallel lines, either vertical or horizontal; the step was to frame a thick skeleton, and fill in the open spaces with thinner pieces called panels. All that sort of woodwork that is called framed joinery practically comes to this, though some races have preferred putting all but the outside frame-work at acute angles; the best known specimens of this method are to be found in Saracen and Japanese work. The abrupt step from the plane of the frame to that of the panel was softened and beautified by molding, and, except by different treatment of the width, thickness, and curvature of the moldings, there is no way of bringing planed framed woodwork into the realm of art, but by proportioning the panels and frame-work harmonically; we can then engrave or incise the whole, or parts, or we can carve them into patterns or into figures. Wood has a small range of colors, white, yellow, red, brown, purple, and black, and a great variety of tones and tints in these colors, and we can still more vary the tints by oils, resins, and gums. Dragon's blood is much used for staining mahogany, rose, and other woods that are reddish by nature, or are wanted to be so, and is now known to be the resin from a palm, and was one of the Greek cinnibars, the other being vermilion; but Sir John Maundeville, in his "Travels in the East" (1322-56), gives an account of how they hunted the dragon for his blood. Few woods stain well except in small pieces, and when stained are mostly used for inlays. Woods are sometimes variegated, usually marked by stripes, veins, curls, or dapples. As the mind of man is greedy of novelty, we admire that to which we are unaccustomed, and often imitate a choice wood by painting a common one. In France they sometimes grain oak to imitate deal, while we grain deal to imitate oak.

Wood may be inlaid with other woods, with bone, ivory, tortoise-shell, mother-of-pearl, and other shells, with metals, with marbles, with precious stones, with glass, pottery, china, or enamel, either plain or in patterns. Living as most of us do in hired houses, we hardly think of anything but painted deal, the painting being renewed every few years, according to the caprices of fashion. Modern inlaid woodwork most of us have never seen; what we take for it is marquetry—two veneers of different colors cut into the pattern wanted, and one fitted into the other, and the whole glued on to a backing. Inlaying is sinking out the solid wood and letting in pieces of other colored materials, and requires much greater care and skill than marquetry. There are said to be only five men in England who are first-rate at marquetry, and most of them are foreigners. The main merit of real inlay is this, that at the worst the inlay can but come out, while veneer, if it gets damp, or if the glue gets too dry, comes off bodily. Very few people appreciate the value of hard wood, which has the incidental merit of not bruising so easily as soft; but its main merit is preserving the decorative color originally designed, and that it can be inlaid, or if carved, is not spoiled by successive painting. Oak is mostly our highest ambition. The mediævals and the people of the last century were quite right to plaster and paint, or to gild it, for new oak is one of the vilest colors—a sort of cross between cold veal and a top-boot. If not French polished, it may get a decent color in the days of your great-grandchildren, though when new it does not make a bad background for inlays of ebony, other colored woods, and ivory. Spanish mahogany also looks well when it is about a century old, and is then a blackish purple. For dignity nothing is so serviceable as ebony, or wood stained black. Ebony varying from black, through brown to yellow, or through grey to black, has the inestimable advantage of variety, which dyed wood mostly wants. In this respect it is like real black marble, that is rarely without variations to gray or brown, and more often than not has white flecks or veins in it, so that you do not mistake it for enameled iron or slate. [Specimens of marquetry shown.] The marquetry of floors may be equally well inlaid in patterns, only it wants to be done on a larger scale.

For the necessary woodwork of a building, exclusive of furniture, little turning is required, except for balusters. Turning is a cheap means of contrasting two or three simple forms, the square, octagon, etc., with the round, and getting harmonic proportions in the round; for the architect has to follow the example in the Eton Latin Grammar, "*Mutat quadrata rotundis*"—a great part of his art is in changing shapes from square to round. There is another method of enriching woodwork that I have omitted, and I hardly know where it originated or who carried it on—probably the Milanese; but you find abundant specimens at Venice, sometimes in doors, but oftener in picture and mirror frames, and in cabinets. The moldings are mostly original, bold and striking, containing all the necessary variety of width, curvature, and projection; the moldings are occasionally, and the flat surfaces are always, enriched by slight variations of surface that may almost be called textures, such as basket-work, minute beads (in the carpenter's sense) of various altitudes, often forming a meander; sometimes a sort of magnified pile is used, and the color is nearly always black. These enrichments are still made here by colonies of foreigners in the back streets about Rathbone Place. Our manufacturers seized with avidity on the few patterns that are coarse, ugly, or vulgar; you can find plenty of them on expensive pianos. The Saracens, mostly inhabiting hot countries where both air and privacy are wanted, made great use of turned-wood lattice-work of an infinite variety of patterns where the close and the open were contrasted, not unfrequently containing texts from the Koran, and these again contrasted with the solid. The Chinese and Japanese, instead of ephemeral painting, use lacquer mostly of dark color, from aventurine to black, and enrich it with gilding or color, or with low reliefs in gold-colored lac; the metals, ivory, mother-of-pearl, and precious stones are often inlaid, and are frequently carved and raised above the surface. The Chinese and Japanese, having once been colorists, occasionally furnish us with old lacquer in low tones that is superb. Considering how the Japanese have taken us captive by their art,

it is surprising that so little use has been made of late of their fine lacquered panels; but unless we can emulate the cheap broom seller, who stole his brooms ready made, we either have not wit or industry enough to avail ourselves of that which would give piquancy to our designs.

Mr. Ruskin is not complimentary to our age, for he speaks of it in his Oxford lecture as, "An age without honest confidence enough in itself to carve a cherry stone with an original fancy, but with insolence enough to abolish the solar system, if it were allowed to meddle with it."

Some of the Chinese black lacquered ware, inlaid with gold and black mother-of-pearl, is as beautiful as Labrador spar, and I have seen black lacquered Indian cabinets of large size, inlaid with squares and patterns of black mother-of-pearl, that are more gorgeous in color than anything but fine stained glass. * * *

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1889, at Philadelphia. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month. Annual meeting first Thursday in October, 1888. Next meeting last Saturday in September. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. Next quarterly meeting, first Tuesday in June. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October in each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. G. W. Williamson, secretary. Annual meeting, November 5, 1888.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The annual general meeting of the Edinburgh Architectural Association was held July 6, in the Architectural Hall, George street—Mr. Hippolyte J. Blanc, president, in the chair.

The secretary, Mr. T. Fairbairn, submitted the annual report, which contained the record of a year of successful work by the association. During the year the association had added thirty-four members to its roll, while the withdrawals had been considerably less. The treasurer, Mr. Whitelaw, submitted the financial statement, which showed a balance in favor of the association amounting to £146, compared with £170 last year. It was explained, however, that there had been £36 of extraordinary expenditure on account of the furnishing of the new hall and additions to the library, so that the association was, financially, in as good a position as last year. Reports submitted on behalf of the Sketch-Book Committee by Mr. Gordon, and the Work Class Committee by the president, indicated continued success. In the work class there had been twenty-three students, whose work, and the quality of it, showed an

advance on the previous year, and prizes gained at the class and in connection with the sketch-book competition were presented in the course of the evening.

Professor Baldwin Brown was appointed president for the ensuing year, with Mr. Blanc as past-president; Mr. John Kinross and Mr. Archibald Macpherson were appointed vice-presidents. Mr. T. A. Fairbairn was continued in the office of honorary secretary, and Mr. A. D. Fairbairn was appointed treasurer.

The president then delivered his closing address, in which he reviewed the work of the session. In speaking of the work classes, he pointed out how invaluable these were as a supplement to the work of the office; and he thought it was a matter of credit that with so little encouragement so much was being done, and so well. The number of students attending the classes was increasing, and they were a fit subject for special effort to secure external help for their endowment. The several professions in the city had each their centers of teaching, and he argued that the position which architecture held among the professions, and the effect of encouraging it in beautifying the city and making it more attractive, furnished a claim on a share of the surplus from the Exhibition profits. He asks that, before it was too late, a combined effort should be made to petition those who had the distribution of the fund, in the interests of the endowment of these classes. The other leading topic in the address was the subject of registration, and Mr. Blanc argued that the architect could not be brought to the level of test examination. There were, doubtless, minor qualities which went to make up the architect which could form the subject of academic trust, but registration could not invest the constructor in the garb of an artist. Architecture should be free if it would have a healthy, vigorous growth, and in that view it seemed unnatural to make it a close profession. In closing, Mr. Blanc spoke of the greatness of the architect's profession, which had raised monuments which time itself seemed powerless to destroy. It was fortunate that the art was being fostered again under somewhat favored conditions; for there was an increasing section of the community which had risen to a sense of healthy artistic feeling which was daily increasing. It was for them accordingly to enlarge that appreciation through the means of their profession.

On the motion of Professor Baldwin Brown, the office-bearers were thanked for their services during the year, and the meeting then ended.

Our Illustrations.

Boston Sketch—Old Work.

Residence for E. Rotan, Waco, Texas; Thomas B. Annan, St. Louis, architect.

Elevations and perspective of a residence; S. S. Beman, Chicago, architect.

Residence for S. W. Gillman, Hyde Park, Ill.; George W. Maher, architect, Chicago.

Board of Trade building, Fort Worth, Texas; A. J. Armstrong, architect, Birmingham, Alabama.

Residence for Mr. Warring, Brooklyn, N. Y.; E. G. W. Dietrich, architect, Brooklyn, New York.

The Cuyahoga County Soldiers' and Sailors' Monument, to be erected in Monument Park, Cleveland, Ohio; Levi T. Scofield, architect. Several designs have been made and submitted for the soldiers' monument to be erected in the Monument Park, in the city of Cleveland, Ohio, but the work has been entrusted to Mr. Levi T. Scofield of that city. He is not only the architect but the sculptor. He has employed to aid him in modeling the groups of statuary, Messrs. George T. Brewster, George Wagner and August Godis, of New York, sculptors, who are now actively engaged. The monument will have a base 95 feet square and 5 feet above the ground, reached by steps at the four corners. On the base will be a building, or relic room, 40 feet square in the clear, built of granite with stone roof, the floor and ceiling of which will be of marble. The walls will be lined with marble tablets, on which the names of the dead heroes will be inscribed. The column which passes up through the building will be of dark polished granite with bronze capitol and bands. The column, with surmounting figure, will be 125 feet high above the grade line. The shaft will be 7 feet in diameter at the base, gradually diminished. On each of the four sides of the building will be a bold pedestal 7 by 18 feet and 10 feet high, with a clear walk around each of 8 feet. On these will be located the groups of statuary. The figures to be 7½ to 8 feet high, in bronze. On the north side will be the infantry group or "Color Guard." The artillery group, "Short Range," on the east. The cavalry, "Defense of the Flag," on the west, and "Mortar Service" to represent the navy, on the south. Bronze panels in the face of pedestals will be trophies of the branch of service to which they are attached. There will be two massive lamp posts in bronze, 20 feet high, lighting each group, the bases of which will be emblematical, mortars on end for the artillery, capstans for the navy, and so on. America on top will be a vigorous and original figure in bronze. The total cost of the monument will be \$100,000.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

Residence of E. E. Crepin, Kenwood, Ill.; Treat & Foltz, architects, Chicago.

Second Baptist Church, Albany, New York; Charles C. Nicholls, architect.

Residence of H. Clay Pierce, St. Louis, Mo.; Fuller & Wheeler, architects, Albany, New York.

Residence of Mr. Hurlbut, Clifton, Ohio; Buddemeyer, Plympton & Trowbridge, architects, Cincinnati, Ohio.

The Color Guard; At Short Range; two groups of statuary for the Cuyahoga County Soldiers' and Sailors' Monument, Cleveland, Ohio; Levi T. Scofield, architect.

Obituary.

THE death of Mr. William Hay, for twenty years a practicing architect at Toronto, Canada, is announced. He died last month in Scotland, and the Edinburgh *Scotsman* gives the following facts regarding his career:

Mr. William Hay was a native of Cruden, and came to Edinburgh as assistant to Mr. John Henderson, architect, in 1844. After being engaged with him some years he became assistant to Sir Gilbert Scott, by whom he was sent to Newfoundland as clerk of works to the new cathedral there. At the completion of the works he removed to Canada and commenced business in Toronto, where he had a considerable and varied practice, extending to Bermuda, which he had to visit on several occasions. In 1864, he resolved to return to Edinburgh, where he continued in practice, and ten years since he assumed Mr. W. Henderson as a partner. He will be remembered by many in connection with the restoration of St. Giles' Cathedral, a work entrusted to him by the late Dr. Sir Wm. Chambers, and the admirable taste and judgment displayed in which have been universally acknowledged and admired. Immediately after this he proceeded again to Bermuda in connection with the erection of a new government house and a new cathedral in place of Old Trinity Church, which had been destroyed by fire. He took occasion on this visit to make an extensive tour in America, in company with his wife and daughter, and had many meetings with old friends there. For many years Mr. Hay was a prominent Freemason, and for some years was master of a lodge in Toronto, and on his return to Scotland became master of the lodge St. Andrew, Edinburgh. He held for many years high office in the Grand Lodge and in the Supreme Royal Arch Chapter of Scotland, and was a Knight Templar, and a leading member of the Supreme Council in Scotland. By the Freemasons of Scotland his death will be deeply regretted. For the last eight months, owing to illness, he has been unable to leave his residence at Joppa, where his death took place in his 70th year. He had a large circle of friends, and was of a kindly and genial disposition, and ever ready to respond to a call of charity. He was a conservative in politics, and a zealous and devoted Scottish Episcopalian, and held several appointments in connection with the Episcopal church.

Mr. Hay commenced practice in Toronto in 1852, and left a large number of important structures as monuments to his genius, which stand today as good specimens of studied architecture.

Mosaics.

THERE is a large, finely-lighted corner office in the Chicago *Times* building, fourth floor, which can be had for \$20 a month. It is a good chance for an architect wishing to make a change in location.

ARCHITECTS ADLER & SULLIVAN have let the contract for the mammoth organ for the Chicago Auditorium building to Roosevelt, of New York. It will be eighteen months in building, is intended to be the best organ yet produced in this country, and will cost \$44,000.

J. H. SIEGRIST, JR., & Co., have just closed a contract for 460 Brightman Mechanical Stokers with the St. Louis Steam Heating and Ventilating Company. The above machines are to be used under the boilers at the Lionberger building, now in course of erection in St. Louis, Mo. This will, without doubt, be the finest arranged plant for a commercial building of any in this western country.

ERNEST V. JOHNSON, manager of the Pioneer Fireproof Construction Company, of Chicago, was married July 18 to Mrs. E. L. Brooks. The surprise of the many friends of the genial gentleman will only be equaled by their hearty good wishes. But Mr. E. V. (ever victorious) Johnson's contracts have been a frequent source of surprise, and in this, the most valuable he ever entered into, he will be allowed any amount of extras.

MR. JOHN MEIGGS EWEN, of Architects Burnham & Root's office, Chicago, will commence another course of his popular and beneficial lectures upon construction, upon the first Friday in September. As we have before stated, this is a rare opportunity for Chicago draftsmen to become schooled in the different methods and problems of construction. The class will of necessity be limited in number and applications should be forwarded to Mr. Ewen at once.

THE Linden Glass Company and Messrs. Spierling & Linden, jointly, have recently completed the following contracts: Stained glass and decorating Northwestern Mutual Life Insurance building, Milwaukee; residence of G. M. Pullman, Pullman Island, Alexandria Bay, N. Y.; Mr. Wainwright's house, St. Louis; a residence at Cheyenne; residences of Edwin Partridge and W. S. Jones, Chicago. Also have in hand contracts for stained glass for G. M. Moulton's house, Chicago; Scoville Institute, Oak Park, and decorating People's Theater and the residence of Mr. Giles, Chicago.

A NEW and novel radiator, styled the Bundy "Elite," has recently been brought out by the A. A. Griffing Iron Company. The cardinal features of this radiator are its three-pipe constructions, positive circulation, and wonderful adaptability to varying positions. Also the radiator has an arabesque design. All sections are duplicates (no "heads" or "tails" being among them). The legs of the radiator are arched and detachable and can be set under any section. The radiator has positive circulation, as the steam or water moves always in a forward direction, thus effectually guarding against conflicting friction of the three elements. Further particulars will be given gladly by the manufacturers.

THE Supreme Court of Massachusetts, by a decision rendered June 19, 1888, has declared it unlawful for a labor organization or striking employees to display a warning banner in front of a business establishment. The decision is made in the famous banner case of Sherry vs. Perkins. Patrick F. Sherry, a prominent Lynn shoe manufacturer, sought an injunction against Charles E. Perkins and Charles H. Leach, respectively president and secretary of the Lasters' Protective Union, and others, to prevent the display of two banners in front of the plaintiff's factory in Lynn. The banners bore inscriptions to the effect that lasters employed on the premises were on a strike and that others should keep away. The first of these placards was displayed from January 5 to March 22, 1887, and the second from the latter date up to the present time. The result of the difficulty between Sherry and the union was numerous personal assaults, and several encounters assuming the proportions of incipient riots. The troubles attracted general attention at the time. For over a year the fight has been waged with unremitting vigor, and the state board of arbitration has investigated the difficulty and exercised its influence in vain. The interest has, in a measure, been a test of the strength and influence of the lasters' union. According to the opinion of the court it was found that

the act of displaying banners with devices as a means of threats and intimidations to prevent persons from entering into and continuing in the employ of the plaintiff was injurious to the plaintiff and illegal, and the plaintiff is not restricted to action at law for remedy, but is entitled to an injunction.

Railroad Notes.

FIVE Harvest Excursions have been inaugurated by the Burlington Route, C. B. & Q. R. R., which will sell from principal stations on its lines, on Tuesday, August 21, September 11 and 25, and October 9 and 23, harvest excursion tickets at half rates to the farming regions of the West, Southwest and Northwest. For tickets and further information concerning these excursions call on your nearest C. B. & Q. ticket agent, or address P. S. Eustis, general passenger and ticket agent, Chicago.

A BEAUTIFULLY printed and lithographed pamphlet has been issued by the popular tourist railway, the Wisconsin Central Railway, descriptive of Fox Lake, Illinois, and its environs. The illustrative plates are all produced from photographs by the photogravure process, and the beauties of this celebrated fishing, hunting and general place of recreation is described in the text with vivid minuteness without exaggeration. Though little is said about the Wisconsin Central Railway service, this is an important factor in the popularity of any summer resort. The service of this railway is preëminently superb. The coaches are the best made, and every employé seems to understand that passengers are guests for whose comfort as well as safety they are responsible. Send to H. C. Fuller, general ticket agent Wisconsin Central Railway, Chicago, and procure a copy of this bright little pamphlet.

THE popularity of the Wisconsin Central Railway, as a through route to St. Paul and westward to the Pacific, is well deserved, but this is only one of the many points in which it wins public favor. Its excursion business is large and varied. From the immense crowds of people it takes daily over its beautiful and picturesque line northward, whose destination may be anywhere from Fox Lake, Illinois, to Ashland, on Lake Superior, it caters to the tourist who wishes to go west in search of health or riches. It has for the season of 1888 inaugurated a series of harvest excursions to Minnesota and Dakota. The fare is one-half for the round trip, and tickets are good for thirty days, with stop-over privileges west of St. Paul. These excursions will leave Chicago on August 21, September 11, September 25, October 9 and October 23. Particulars can be obtained from the general ticket agent in any large city in the country, or by writing to the general offices at Milwaukee, Wisconsin.

A NEW Pullman palace sleeping car line between Chicago and Philadelphia has been established, via Chicago & Grand Trunk and Lehigh Valley railroads. The Chicago & Grand Trunk Railway announces to its patrons that, east-bound, commencing Friday, July 20, on their limited express, leaving Chicago at 3:25 P.M. daily, will be attached one of the most modern Pullman palace sleeping cars, to run through to Philadelphia via Niagara Falls and the Lehigh Valley route, arriving at Philadelphia at 7 A.M. daily on the second morning. Returning, west-bound, the car will leave Philadelphia daily at 8 P.M., arriving in Chicago on the Pacific express at 8:10 A.M. on the second morning. What should make this route particularly popular is that on the east-bound journey a stop-over at Niagara Falls of seven hours is allowed, and on the west-bound journey a stop-over of four hours, giving passengers ample time to visit the Falls. However, passengers not desiring to lay over at the Falls on the east-bound journey may change at Niagara Falls, taking a Pullman parlor and buffet car, leaving the Falls at 8:30 A.M., arriving in Philadelphia at 10:49 P.M.

Business Outlook.

OFFICE OF THE INLAND ARCHITECT, }
CHICAGO, AUGUST 10, 1888. }

Prices for nearly all kinds of building material have reached a point which forbids further concessions by manufacturers and dealers. Whatever advantage is to be derived from a downward tendency in prices is now to be realized. The depression has been working since the opening of the season. Buyers have been pursuing a conservative policy of purchasing material for actual work in hand. The building principals have done remarkably well throughout the season. There is less activity in some few states. This is compensated for by the greater activity in towns of from ten to forty thousand inhabitants. There has also been great activity in towns of from one to ten thousand in the West and South. New York has fallen behind last year, but not to the extent that was predicted last April. Boston has not reached its last year's limit, but New England has held her own. Big influences have been at work in that section. Labor agitations have been indirectly the cause of considerable building. Manufacturers have found it to their interest to leave larger cities and start up in country places. This has given a good deal of factory and house building work. Manufacturers are selecting sites for shop building where taxes are lower and where walking delegates are less troublesome. The smaller towns of New England have received quite a stimulus on account of the advantages they offer to manufacturers. Throughout the middle states building conditions are nearly the same as last year. Philadelphia still spends as much money in house building. Had the Reading terminus succeeded it would have swelled the expenditures in that city a million or two dollars. Even as it is the Reading president owns his determination to build his elevated road through the city, leaving the streets uncovered until council's permission is formally given. Building activity in Pittsburgh has been almost up to last year. What they have lost has been gained in country places. Within thirty miles of Pittsburgh three thousand houses have been begun in three months. Throughout New York there is great amount of house building activity. The same is true of Ohio. All through the Ohio valley there is a very fair degree of activity, although it does not extend into the building of shops and mills. The building of manufactories has been checked to some extent, but what has been lost in the North has been gained in the South. The brickmakers throughout the country have had a very successful year throughout, though a not very profitable year. Prices have receded somewhat. All brickmaking establishments anticipate a busy year up to the close of the season, and those who manufacture intend to increase their producing capacity. The iron trade has been suffering some, but its condition is improving with an increased demand. That

there is an increased demand was shown by the surrender of the manufacturers to their workmen. They could not stop because of the urgent demand for material. About one-third of the nail-making capacity of the country is still idle, and nails are a drug on the market at \$1.90 in most markets. The lumber trade has been phenomenally active West and South and East. Prices have been steady all season. The planing-mill interests have been busily engaged.

Synopsis of Building News.

Atchison, Kan.—D. C. Newcomb is building a four-story block, to cost about \$40,000.

Aurora, Ill.—Architect J. E. Minott has plans for a brick and stone hotel and store building, 86 by 66 feet.

Chapman, Kan.—Architects Hadley & Cooper, of Topeka: For the County School Board, two-story brick and stone school building, 56 by 60 feet; cost \$12,000; Fellows & Van Zant, builders.

Chicago, Ill.—Architect J. J. Flanders: For Board of Education, two-story and attic brick and stone school building, 130 by 267 feet, Thirty-second street and Forest avenue; cost \$90,000.

Architect Wm. Stribleman: For W. W. Kimball, dry kiln heating house, etc.; cost \$41,000. For E. Harvey, two-story barn, 46 by 48 feet; cost \$3,500. For S. C. Raggio, three-story and basement store and flat building, 24 by 96 feet; cost \$11,000. For C. Pfeiffer, three-story and basement flat building, 50 by 60 feet; cost \$13,000.

Architect F. B. Abbott: For D. Williams, three-story brick and stone flat building, 55 by 65 feet; cost about \$15,000. For J. R. Dietz, two-story brick and stone store and flat building, 50 by 58 feet; cost \$10,000.

Architect J. F. & J. P. Doerr: For John Gahan, three-story and basement flat building, 22 by 80 feet; cost \$7,000. For Henry Fasking, flat and hall building, 50 by 80 feet; cost \$15,000. For N. Lewis, two-story frame dwelling, 23 by 60 feet; cost \$50,500. For John Burke, three-story and basement store and flat building, 22 by 80 feet; cost \$7,000. For M. Larson, three-story and basement flat building, 22 by 52 feet; cost \$5,000. For John L. Jones, two-story stone front dwelling, 22 by 66 feet; cost \$8,000.

Architect J. L. Merriam: For G. S. Thomas, three-story and basement store and flat building, 49 by 70 feet; cost \$12,000. For the School Board at Kensington, two-story brick school building, six rooms; cost \$12,500.

Architect E. R. Krause: For J. N. Young, two-story and basement stone front residence, 25 by 53 feet; cost \$7,000. For J. G. Schott, two-story and basement store and flat building, 25 by 62 feet; cost \$7,000.

Architects Lutken & Thielow: For Henry Cohn, three-story and basement flat building, 72 by 90 feet; cost \$20,000. For E. Bue, three-story and basement flat building, 22 by 68 feet; cost \$5,000. Also a three-story and basement flat building, 27 by 58 feet; cost \$6,000.

Architect C. O. Hansen: For W. Kern, four-story and basement flat building, 24 by 80 feet; cost \$10,000.

Architect R. Rae: For O. H. Watson, two-story frame dwelling, 28 by 48 feet; cost \$4,500. For S. Brown, two-story frame dwelling, 28 by 50 feet; cost \$5,000. For Chas. S. Cleaver, five two-story frame dwellings; cost about \$15,000.

Architects Schaub & Berlin: For Mrs. E. S. Mandel, three-story and basement store and flat building, 25 by 85 feet; cost \$9,000. For Otto Rohe, two-story and basement flat building, 22 by 60 feet; cost \$5,000.

Architects Furst & Rudolph: For Louis Kinstlar, three-story store and flat building, 24 by 64 feet; cost \$7,000. For R. E. Harsch, two-story and basement stone front residence, 25 by 60 feet; cost \$6,000.

Architects Burling & Whitehouse: For Charles L. Hutchinson, alterations to residence; cost \$25,000. For J. Wadsworth, two-story brick and stone store and office building, 92 by 42 feet; cost \$15,000.

Architect Julius Speyer: For the Misses Farrell, three-story brick and stone store and flats, 25 by 77 feet; cost \$10,000. For J. T. Healey, three-story brick and stone dwelling, 25 by 66 feet; cost \$18,000.

Architects Ostling Bros.: For John Smith, three-story and basement and attic flat building, 25 by 85 feet; cost \$12,000. For C. O. Olsen, three-story and basement flat building, 21 by 71 feet; cost \$10,000.

Architect F. Foehring: For John Frick, three-story and basement apartment building, 25 by 70 feet; cost \$10,000.

Architect R. G. Pentecost: For A. Moses, two three-story residences, 21 by 57 feet; cost \$18,000. For A. McIntosh, four-story stone and terra-cotta apartment building, 50 by 103 feet; cost \$35,000. For Mrs. M. A. Hennelarn, three story store and flat, 24 by 57 feet; cost \$6,000.

Architect J. J. Egan: For J. K. Prindiville, two three-story brick and stone dwellings, 35 by 50 feet; cost \$10,000. For J. V. Clark, three-story brick and stone flat building, 24 by 92 feet; cost \$12,000.

Architect S. S. Benan reports: Contracts let for the approach to the viaduct at Polk street bridge for the Wisconsin Central Railway. The approach will be 260 feet long by 40 feet wide. The express offices of the depot will be located under the viaduct, and the Fifth avenue front is designed in harmony with the depot design. It will be built of New Brunswick brown stone. The approach will be fire proof with foundation heavy enough to carry a six or eight-story building, which it is proposed to build in the future. The cost of the improvement will be about \$50,000. For the 1st Baptist Society of Milwaukee, Rev. W. P. Helling, pastor, a stone church, corner Ogden and Marshall streets, 125 by 80 feet; cost about \$45,000.

Cincinnati, O.—Reported by Mr. Lawrence Mendenhall: Dullness in building circles still continues with no prospect of immediate improvement. A busy fall is earnestly hoped for.

The report of Inspector Forbush shows a balance on the right side of \$852.39, while the value of the permits amounts to \$378,130.00 for the month of June.

Architect J. B. Steinkamp, has prepared plans for two large store and flat buildings to be erected at Toledo, Ohio, for Thomas Emery's Sons, to be 100 by 100 feet in size, and four stories high, built of common brick with stone trimmings, slate and tin roof, hard and soft wood finish, laundry fixtures, iron fronts, galvanized iron work, fire escapes, dumb waiters, galvanized iron cornice and all improvements; also plans for two large dwelling houses, to be erected at Toledo, Ohio, for the same persons, to be three-stories high, of brick, with stone trimmings, slate and tin roof, iron mantels, hard and soft wood finish, laundry fixtures, galvanized iron cornice, dumb waiters and all modern improvements. The total cost of the above will be about \$30,000.

Architect Emil F. Baude has plans for a two-and-a-half-story dwelling house, to be erected on State avenue and Gest street, for Charles Redge, South and Berlin streets, to be built of brick with stone trimming, inside and outside blinds, iron mantels, galvanized iron cornice and tin roof. It will cost about \$3,000.

Architects S. Hannaford & Son have the plans for store and flat building, to be erected at 24 and 26 East Fifth street, for the Wm. Glynn estate. To be 25 by 100 feet in size and five-stories high, of brick and stone, iron front for 1st story, iron mantels, inside and outside blinds, dumb waiters, galvanized iron cornice and tin roof; cost about \$20,000.

Architect William Schubert, Jr., has the plans and carpenter contract for an addition to the building of the Methodist Book Concern on Fourth and Holmes streets, to be two stories high, built of brick with stone trimmings, have softwood finish, outside shutters, metal roof, and all conveniences for a composing room. It will cost about \$5,000.

Architect Charles Crapsey has the plans for a two-and-a-half-story dwelling house, to be erected on June and May streets for Mrs. Louisa Parry, 145 Poplar street, to be built of frame, with hard and soft wood finish, have inside and outside blinds, iron and slate and wood mantels, bath-rooms and water closets, laundry, slate and tin roof, and all conveniences. It will cost about \$5,000. Time well occupied.

Architect Charles A. Dengler, 16 Bavarian building, has the plans for a two-and-a-half-story residence, which he will have erected on Gilbert avenue and Durrell street for himself, to be of brick, with stone trimmings, hardwood finish, hardwood mantels, and laundry, inside and outside blinds, and tin and slate roof. It will cost about \$5,000.

Architects G. & A. Brink are preparing plans for a two-and-a-half-story dwelling, to be built on Scheld street for Christ Meister, 374 Clinton avenue, to be of frame, with pine finish, inside and outside blinds, iron and wood mantels, slate Mansard, galvanized cornice and tin roof; cost about \$3,500. Also for a large store and flat building to be erected on Freeman avenue and Gest street for John Lobeck, of 133 Carr street, of pressed brick and stone, have iron front for first story, pine finish, inside and outside blinds, wood mantels, and tin roof. It will cost about \$6,000.

Cleveland, O.—Architect B. F. Van Develd: For F. S. Sanford, brick and stone residence; cost \$7,000. For St. John's Evangelical Lutheran Society, church and

school building; cost \$6,000. For St. John's Cathedral Parish, brick and stone school and chapel, 134 by 75 feet; cost \$35,000.

Architect F. C. Bate: For D. E. Dangler, residence, to cost about \$10,000. Architects Osburn & Barnum: For Mrs. A. M. Buell, residence, to cost \$8,000. For Geo. H. Warrington, frame residence; cost \$10,000.

Council Bluffs, Ia.—Architect Chas. E. Bell has made plans for a three-story business block, 100 by 200 feet; cost \$100,000.

Council Grove, Kan.—Architect J. H. Leedy: For School Board, two-story and basement brick and stone school building, 65 by 90 feet; cost \$15,000.

Denver, Col.—Architect John J. Huddart reports: The outlook for building this fall is very good indeed. It has not been better for years. For J. P. Timeary, five houses, stone terrace, 100 by 60 feet; cost \$30,000; under way; Harvey & Washburn, builders. For C. H. Smith, three-story stone residence, 40 by 72 feet; cost \$25,000; to be commenced in September. For Mr. Darrington, one-story brick and stone dwelling, 25 by 60 feet; cost \$5,000; just completed; McDonald, contractor. For Mr. Baucharel, three-story brick store building, 50 by 125 feet; cost \$35,000; contract just let to Harvey & Washburn. For H. S. De Sollar, repairs to residence; cost \$4,200; just completed; Larrimer & Co., builders.

Architect F. Goodnow has prepared plans for a two-story double house, to cost about \$5,000.

Among the building permits recently issued are the following, which contemplate an expenditure of \$5,000 or more: J. H. Anderson, two-story brick building, 25 by 110 feet; cost \$5,000. Bennett & Myers, one-story brick building, 50 by 125 feet; cost \$6,000. S. B. Morgan, three-story brick and stone residence, 45 by 64 feet; cost \$30,000. Forbes & Worcester, two-story brick double dwelling, 40 by 45 feet; cost \$5,600. M. D. Clifford, three-story brick addition, 43 by 70 feet, to Lindell Hotel; cost \$11,000. Ed. Hewitt, two-story brick and stone residence, 28 by 50 feet; cost \$7,500. Isaac N. Stephens, two-story brick and stone dwelling, 42 by 50 feet; cost \$6,000. H. W. Aiken, six one-and-one-half-story brick dwellings, 22 by 44 feet; cost \$15,000. J. T. Bailey, two-story and basement brick and stone dwelling, 34 by 52 feet; cost \$12,000. Thomas S. Hayden, two-story and basement brick and stone addition dwelling; also barn, 22 by 32 feet; cost \$7,000.

Des Moines, Ia.—Architects Foster & Liebbe: For the School Board, high school building, to cost \$60,000; McNulty & Lennan, contractors.

Dubuque, Ia.—Architect F. D. Hyde reports: For Rev. P. Burke, three-story brick stores and flats, 40 by 72 feet; cost \$8,000; under way. For J. W. Conchar, two-story frame dwelling, 28 by 48 feet; cost \$5,000; plans under way.

Erie, Pa.—Architects David K. Dean & Son have made plans for A. T. Griswold for a brick and stone residence, to cost \$4,000. For Richard O'Brien, a large double dwelling. For Wm. Momyer, brick veneered residence; cost \$5,000.

Fort Worth, Tex.—Architect J. J. Kane: For H. W. Williams, four-story brick and stone business building, 50 by 90 feet; cost \$20,000; Smith & Bardon, contractors.

Franklin, Pa.—Architects David K. Dean & Son, of Erie, have prepared plans for H. Lamberton for a residence, to cost about \$6,000.

Freemont, Neb.—Architects F. M. Ellis & Co., of Omaha, have plans for a three-story opera house building, 46 by 100 feet, to be erected here, at a cost of \$25,000. Architect J. Tyler, of Lincoln, has prepared plans for a three-story and basement brick and stone Masonic building, 44 by 125 feet, to cost \$25,000.

Grand Forks, Dak.—Architect H. G. Carter, of St. Paul, Minn., has plans for a five-story brick and stone hotel and store building, 125 by 125 feet; cost \$100,000; also for an opera house, 60 by 140 feet; cost about \$30,000.

Grand Island, Neb.—Architect H. T. M. Fuehrman has planned a church building, 62 by 126 feet, for St. Mary's Catholic Society, to cost \$18,000; Charles Gunther, contractor. For School Board, two-story brick and stone school building, 36 by 62 feet; cost \$6,000. For the Baptist society, three-story brick and stone college building; cost \$30,000.

Grand Rapids, Mich.—In the Kent county court-house competition, just decided, the plans of Sidney J. Osgood were adopted by the Board of Supervisors. The plans are for a three-story brick, stone and terra-cotta fireproof building, with slate roof, closets, stained glass, passenger elevators, steam heat, galvanized iron cornices, iron construction, hard-wood finish and tiling, electric bells and speaking tubes, marble mantels, and electric lights will be used; building to cost \$150,000; contract to be let in October. Architect Osgood has planned for J. Sperr a four-story and basement brick block, to cost \$10,000.

Great Falls, Mont.—Architects C. G. Maybury & Son, of Winona, Minn.: For the School Board, two-story brick and stone school building, 54 by 80 feet; cost about \$15,000.

Kansas City, Mo.—Architect Adriance Van Brunt: For C. B. Adams, six-story brick and stone business building, 60 by 142 feet; cost \$75,000. For R. M. Davis, three-story brick and terra-cotta dwelling, 50 by 65 feet; cost \$5,500; also has plans for a two-story brick and stone store building, 74 by 62 feet, to cost \$7,000. For W. Babcock, brick and stone double dwelling, 43 by 70 feet; cost \$15,000. For J. M. Oglesby, block of three brick and stone dwellings; cost \$12,000.

Architect E. P. Brink: For Hasler Bros., block of three-story brick dwellings, 40 by 95 feet; cost \$15,000. For N. A. Baylor, three-story brick and stone business building, to cost about \$15,000; also has plans for a four-story brick and stone business block, 49 by 115 feet; cost about \$30,000. For C. & P. Bartholomes, five brick and stone dwellings; cost \$15,000. For David Kendall, three-story brick and stone store building, 75

by 50 feet; cost \$12,000. Remodeling building corner of Fifth and Delaware streets; cost \$6,000.

Architect A. B. Cross: For A. A. Lyons, three-story brick and stone residence, 45 by 52 feet; cost about \$15,000. For A. D. Gerard, two three-story brick and terra-cotta residences, 54 by 110 feet; cost about \$10,000. For W. H. Cousane, four two-story brick and stone dwellings, 25 by 88 feet; cost \$32,000. For T. B. Bullene, six brick and stone dwellings; cost \$24,000. For D. E. Croysdale, two-story brick, stone and terra-cotta double dwelling; cost \$10,000. For H. W. Consaul, two-story brick and terra-cotta dwelling; cost \$8,000.

Architect S. F. Chamberlain: For A. D. Johnson, brick dwelling, 34 by 46 feet; cost \$5,500. For B. F. Russell, two-story brick and terra-cotta stores and flats, 50 by 112 feet; cost about \$25,000.

Architect F. A. Hart: For Mrs. Annie Patton, two-story brick and terra-cotta dwelling, 45 by 64 feet; cost \$5,500. For Hayes & Cochrane, two-story brick and terra-cotta store building, 40 by 60 feet; cost \$6,000. For C. W. Baker, block of five three-story brick and stone dwellings, 110 by 40 feet; cost \$30,000.

Architect L. L. Levering: For W. C. Lobenstein, improvements on building 530-540 Delaware street; cost \$14,000. For J. H. Coleman, two-story brick and terra-cotta dwelling, 27 by 45 feet; cost \$4,000.

Among the building permits recently issued are the following, contemplating an expenditure of \$5,000 or over: W. H. Consane, block of four brick dwellings; cost \$32,000. T. B. Bullene, block of six dwellings; cost \$24,000. C. N. Whitehead, brick residence; cost \$17,000. Mrs. K. Widner, brick dwelling; cost \$5,000. W. Babcock, two brick dwellings; cost \$15,000. J. H. Oglesby, block of three brick dwellings; cost \$12,000. W. H. Rothermill, brick dwelling; cost \$6,000. David Kendall, for Dobson, Douglas & Co., brick business building; cost \$12,000. C. & P. Bartholomes, block of five brick dwellings; cost \$15,000. Hayes & Cochrane, brick business building, 40 by 60 feet; cost \$6,000. Coates Opera House, stone and iron stairway; cost \$12,000. Siefried, seven frame dwellings, 14 by 36 feet each; cost \$7,000. Armour Brothers Banking Co., remodeling building; cost \$6,000. Greenlees & Russell, brick dwelling and business building; cost \$25,000. C. W. Baker, five brick dwellings; cost \$38,000. A. J. Williams, three frame dwellings; cost \$5,400.

Architect W. F. Hackney has prepared plans for H. F. Whitney for a five-story brick and stone office building, 65 by 120 feet; cost \$125,000.

Kearney, Neb.—Architect H. T. M. Fuehrman, of Grand Island, has made plans for a brick and stone court house for Buffalo county; cost \$65,000.

La Crosse, Wis.—Architect Oscar Cobb, of Chicago, Ill., has prepared plans for a brick and stone opera house, to cost about \$50,000.

Lincoln, Neb.—Architect O. C. Placey has planned a three-story college building, to be built of brick and stone, at a cost of \$50,000.

Logansport, Ind.—Architects Crain & Krutsch: For D. C. Elliott, three-story brick and stone business building, 40 by 100 feet; cost \$15,000; Medland & Barnes, contractors.

Madison, Kan.—Architect C. W. Squires, of Emporia: For the School Board, two-story brick and stone school building, 60 by 60 feet; cost \$6,000.

Manistee, Mich.—Architect A. Druiding, of Chicago, Ill., has prepared plans for a brick, stone and terra cotta church, 60 by 148 feet; seating capacity 675 persons.

Milwaukee, Wis.—Architect James Douglas: For Mrs. J. G. Flanders, three brick and stone dwellings, 39 by 72 feet; cost \$14,000.

Architect Alf. C. Clas: For Able, Batch & Fitzgerald, four-story brick and stone warehouse, 24 by 100 feet; cost \$15,000.

Minneapolis, Minn.—Architect H. W. Dennis has prepared plans for Dr. E. B. Zier for a block of three-and-one-half-story dwellings, 165 by 165 feet; cost about \$90,000.

Ottumwa, Ia.—Architect Edward Clark reports prospects favorable for fall season. For H. C. Grube, two-story frame dwelling, 28 by 32 feet; cost \$1,200. For L. Lewis, one-story frame cottage, 24 by 30 feet; cost \$900.

Racine, Wis.—Architect J. G. Chandler, for Mechanics' Building Association, six-story brick and stone opera house, 60 by 120 feet; cost \$20,000.

San Antonio, Tex.—Architect O. Kramer has made plans for a four-story brick and stone city hall building 80 by 120 feet; cost \$100,000.

St. Louis, Mo.—Among the building permits recently issued are the following, contemplating an expenditure of \$5,000 or over: J. T. Drummond, brick building; cost \$16,000. First Presbyterian Church, brick; cost \$50,000. J. Fries, brick tenement; cost \$7,000. School Board, brick building; cost \$19,000.

St. Paul, Minn.—Messrs. Beaupre, Keogh & Co., are about to erect an eight-story business building, 100 by 100 feet; cost \$70,000.

Springfield, Ill.—Architects Bullard & Bullard: For Rev. W. N. McElroy, two-story brick and stone residence, 32 by 52 feet; cost \$4,500; Rhodes Bros., contractors.

Topeka, Kan.—Architect George Ropes has let contracts on the three-story brick hotel building, 75 by 130 feet, for Allen Sells, to T. N. Coddington; cost \$30,000.

Warren, O.—Architect C. H. Owsley, of Youngstown: For W. R. Stiles; frame residence, slate roof; cost \$6,000.

Washburn, Wis.—Architect W. H. Webster, of Ashland, Wis.: For Washburn School Board, two story frame school building, 52 by 60 feet; cost \$7,000.

Winona, Minn.—Architect Oscar Cobb, of Chicago, has prepared plans for a brick and stone opera house to cost about \$100,000.

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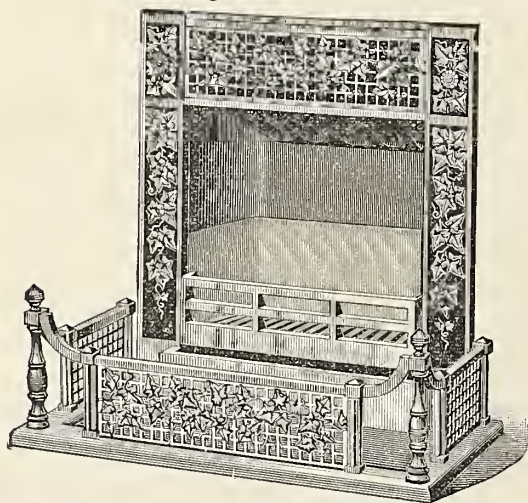
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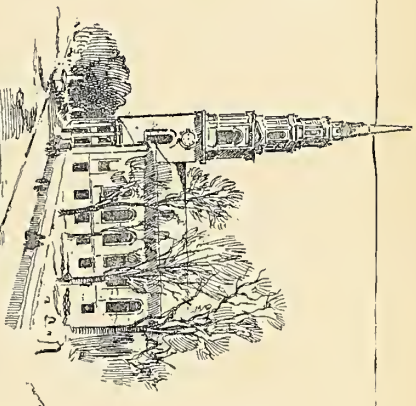
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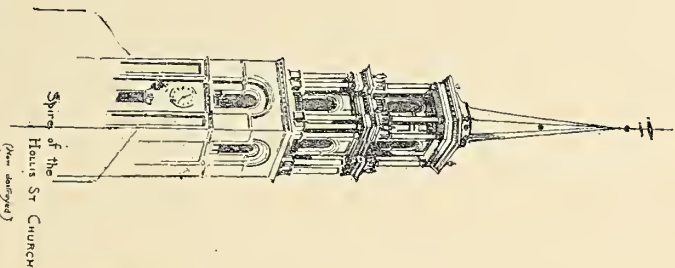
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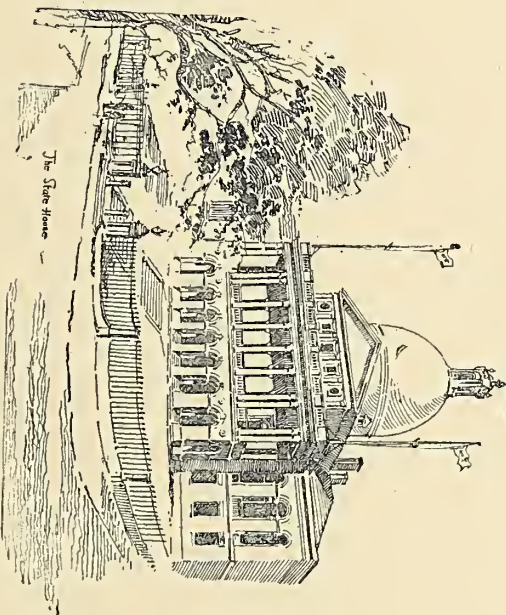
BOSTON SKETCHES OLD WORK



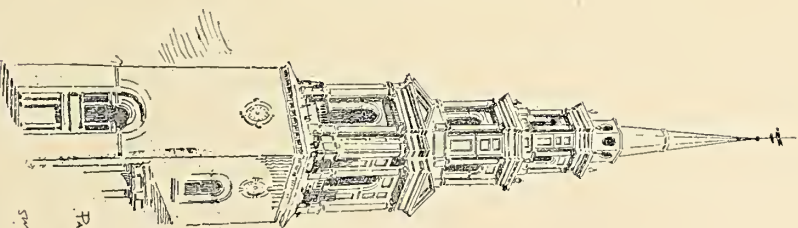
The State House



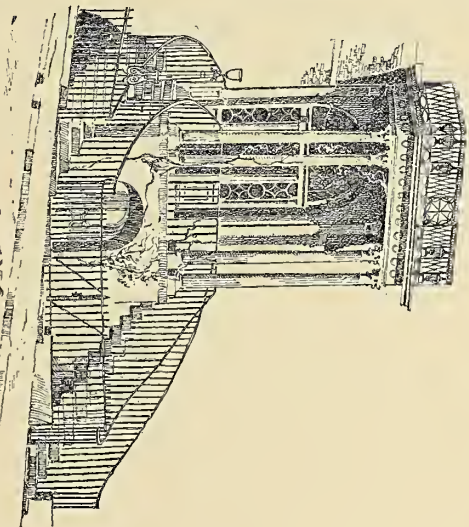
Spire of the Holy Trinity Church
(New design)



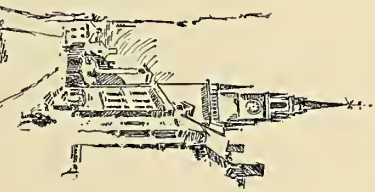
The State House



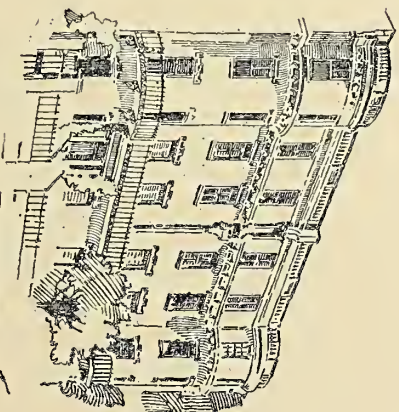
First Church



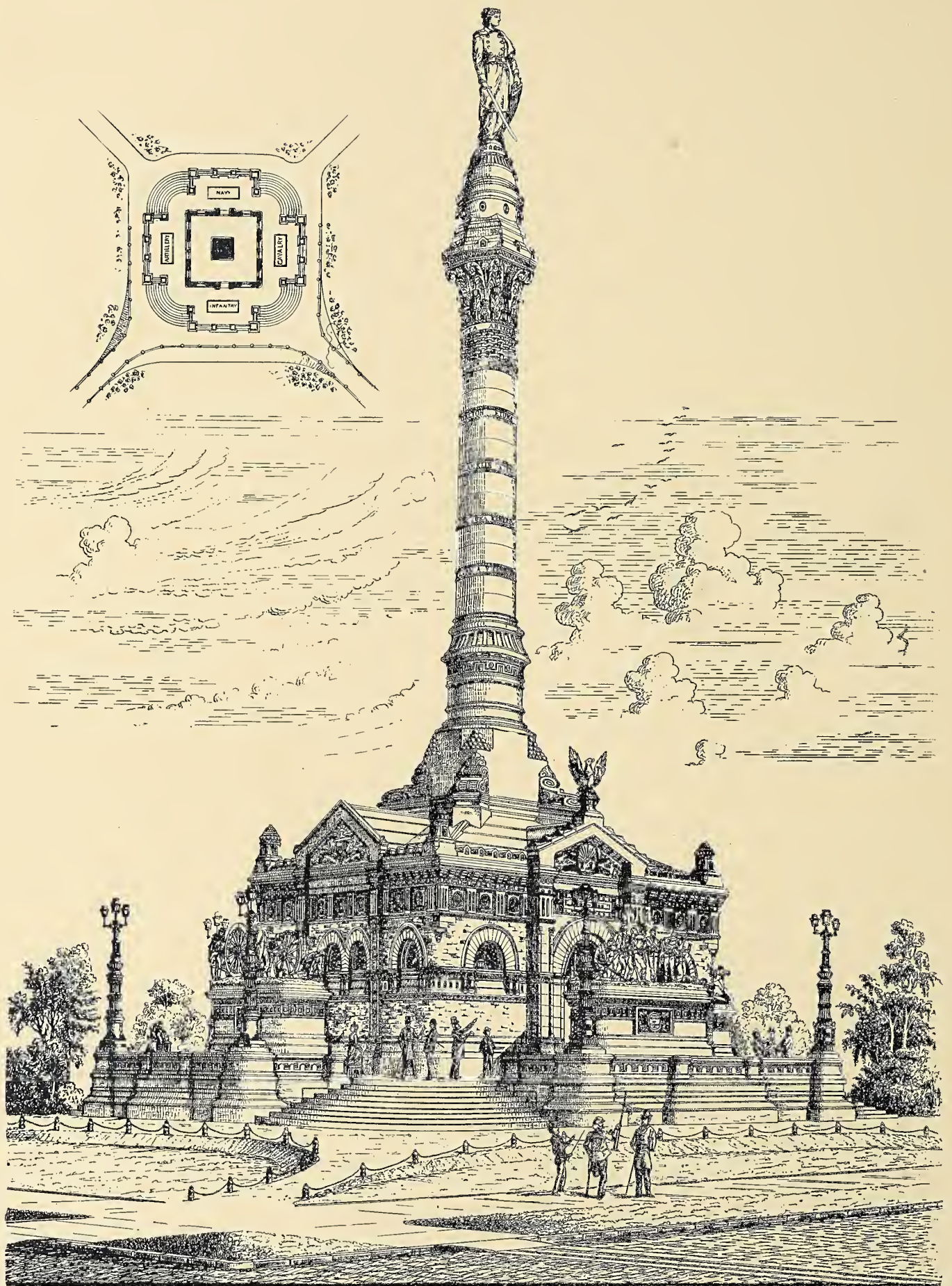
Porch of Ticknor House
(New design)



The Holy Trinity Church
on Salem St.



The State House
on Beacon St.



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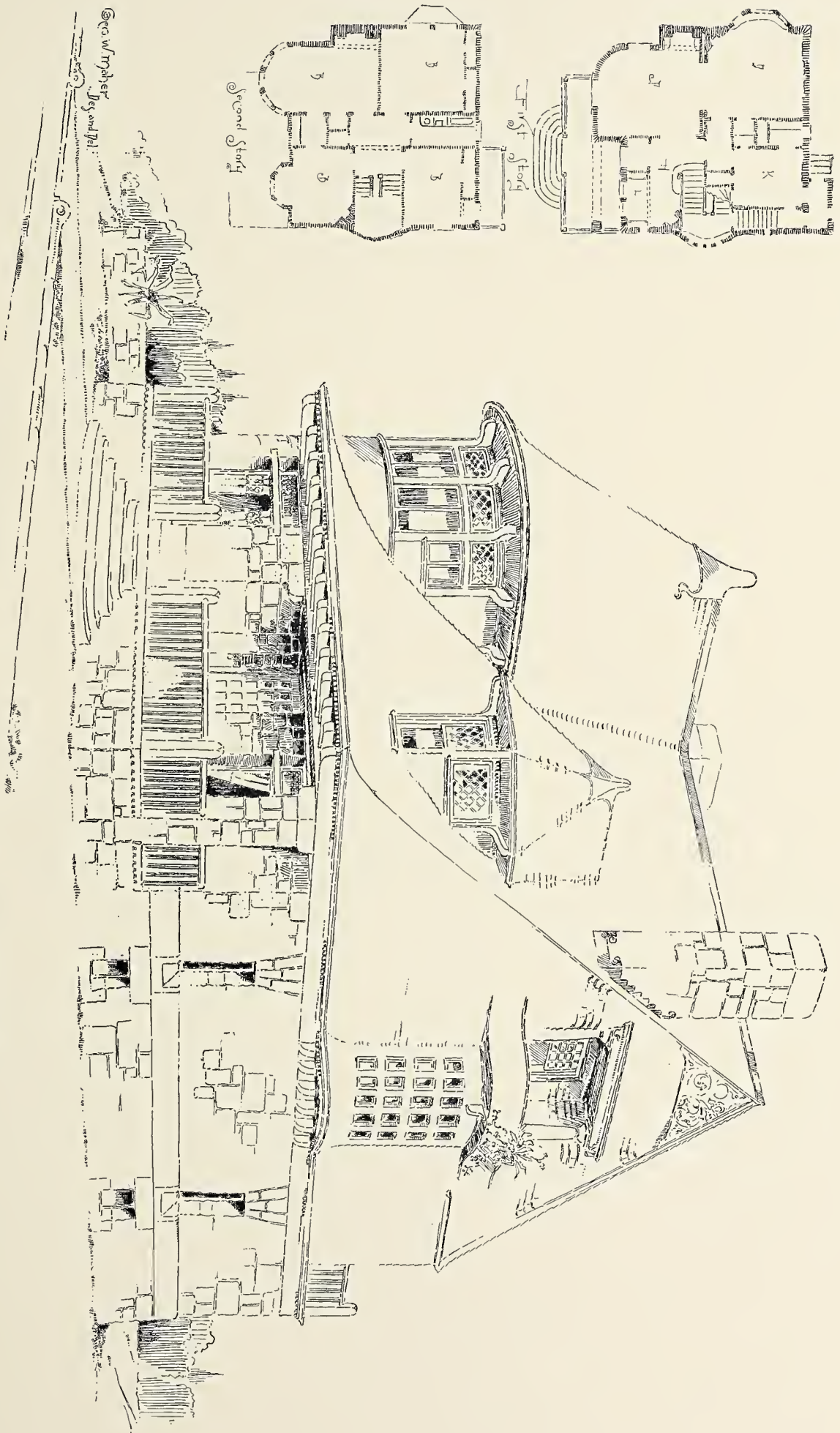
CUYAHOGA COUNTY SOLDIERS' AND SAILORS' MONUMENT, CLEVELAND.

LEVI T. SCOFIELD, ARCHITECT.



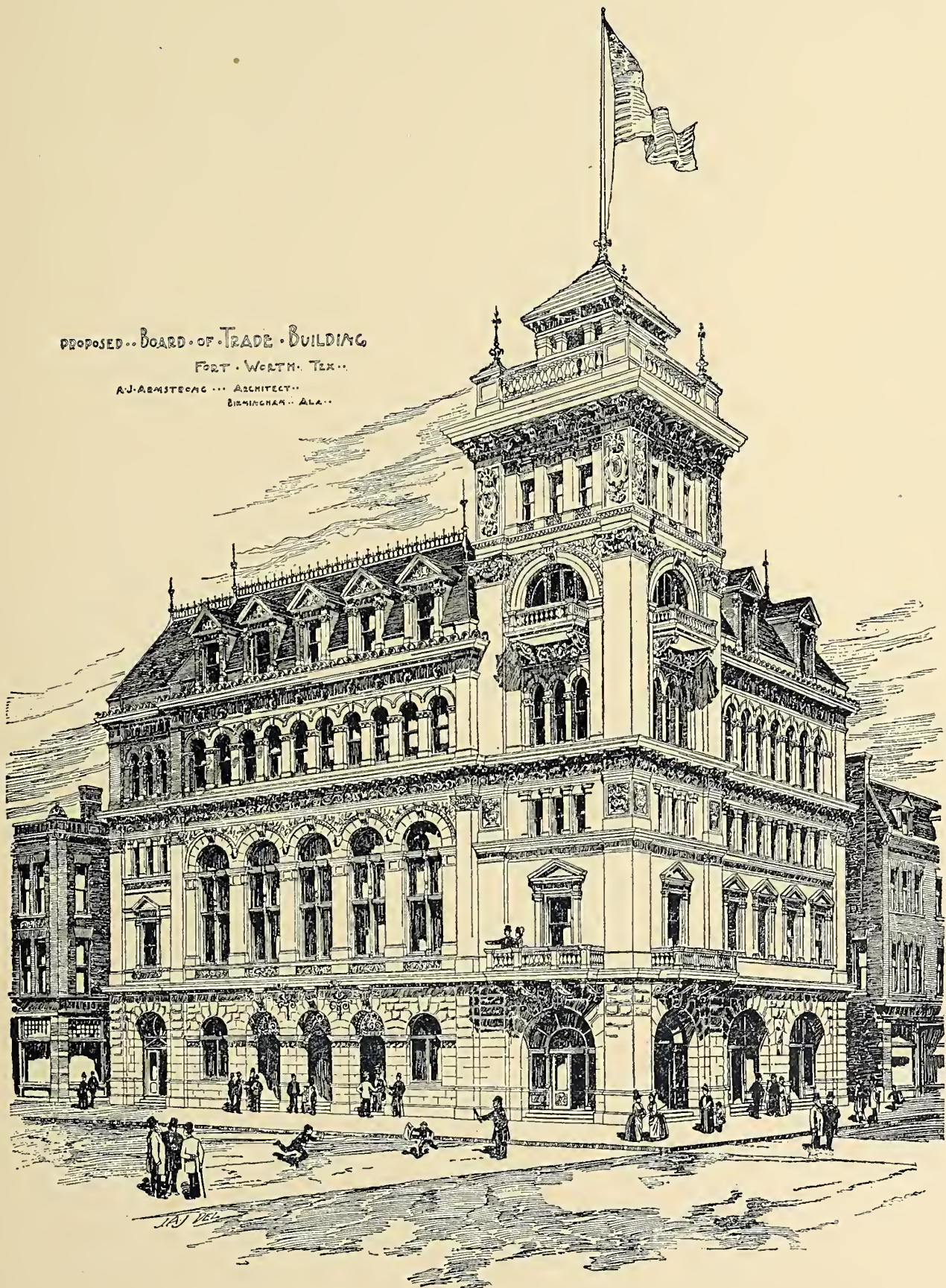
ELEVATIONS AND PERSPECTIVE OF A RESIDENCE.

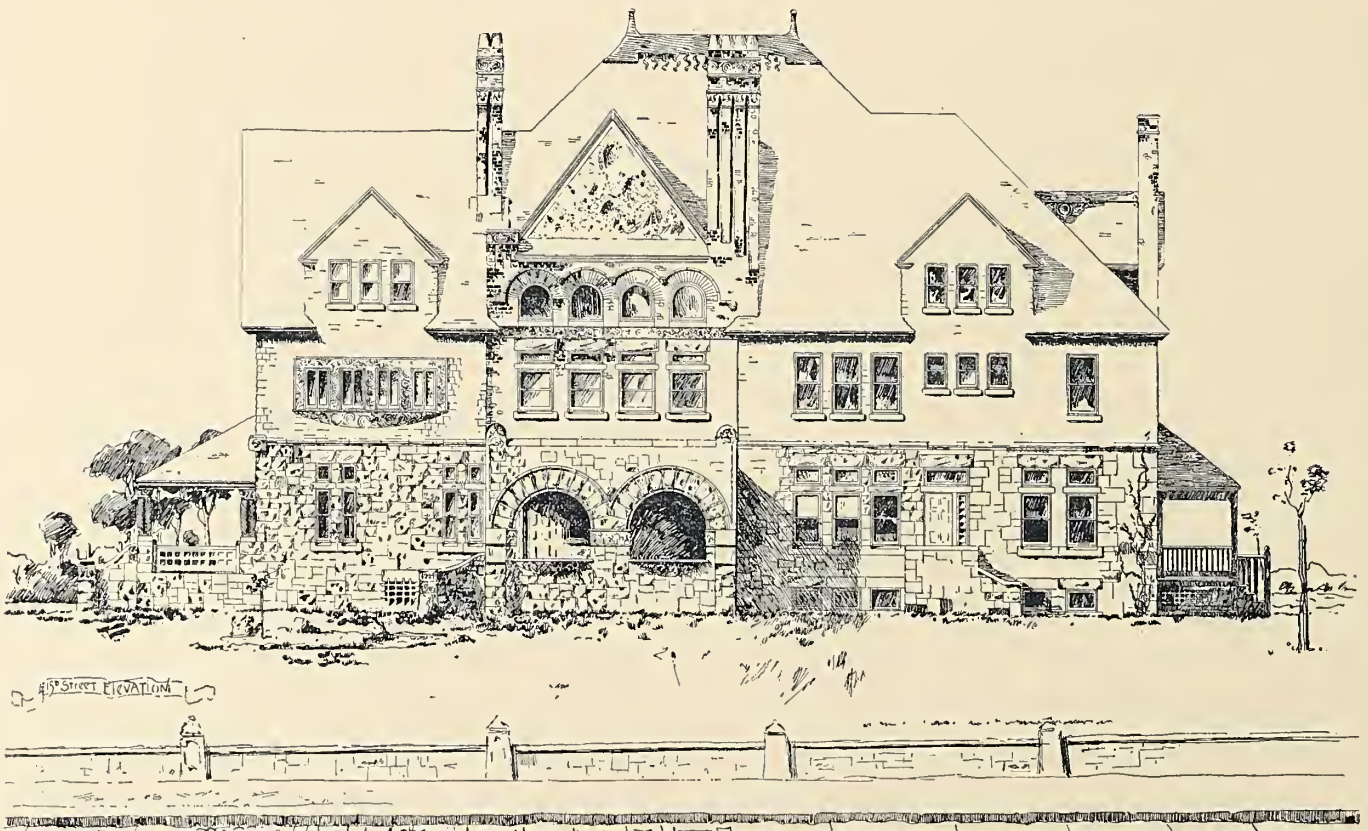
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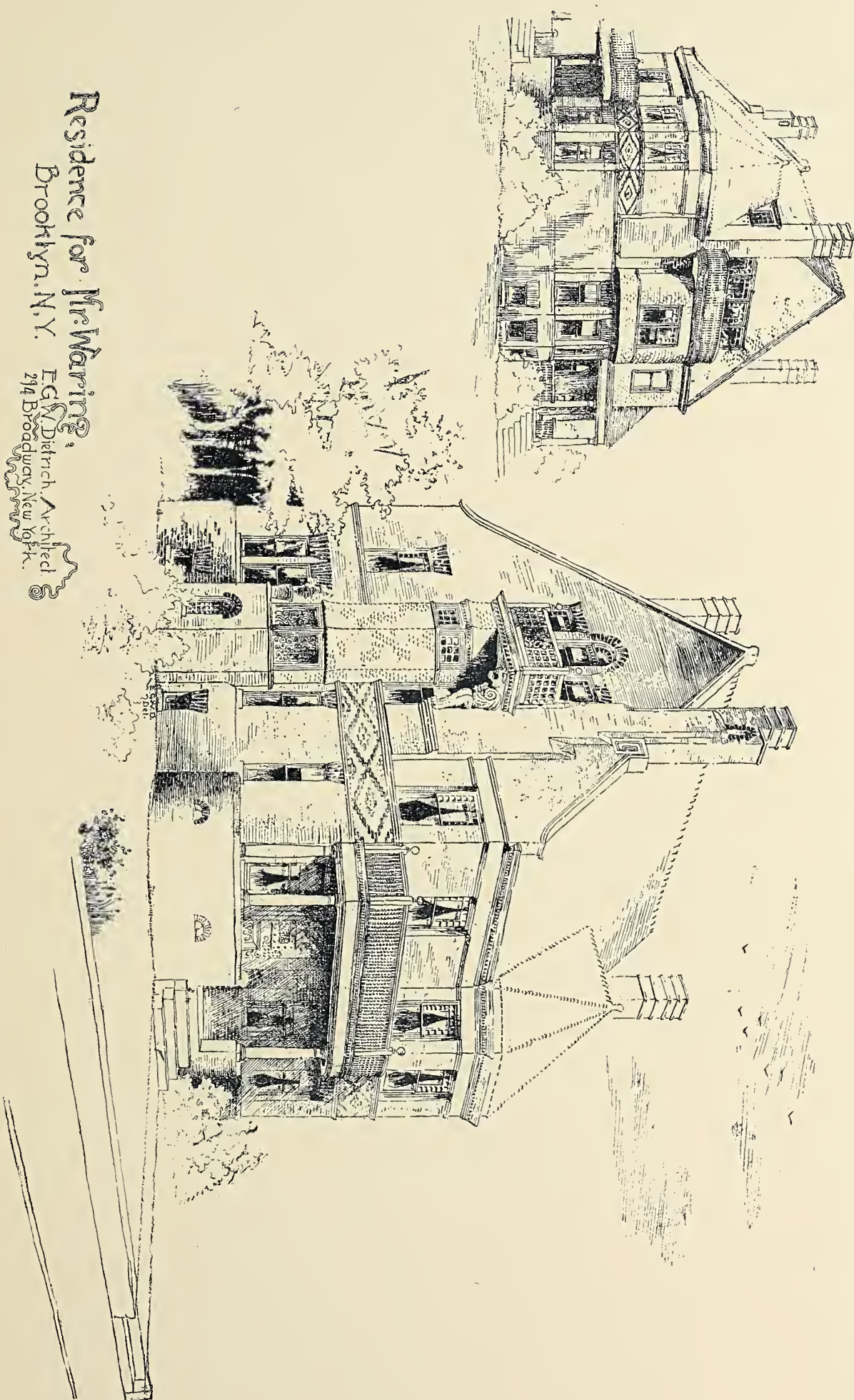




RESIDENCE FOR M. E. ROTAN, WACO, TEXAS.

THOMAS B. ANNAN, ARCHITECT.

Residence for Mr. Waring,
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E. A. Dietrich, Architect.
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SEPTEMBER, 1888.

THE INLAND ARCHITECT
AND NEWS RECORD.

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ARCHITECTS, contractors and owners are alike to be congratulated on the successful conclusion of the labors of the joint committee on a standard form of contract from the American Institute of Architects, the Western Association of Architects and the National Association of Builders. A form of agreement acceptable to these three representative bodies has been framed and adopted by the joint committee, and arrangements concluded for its publication and sale by the Inland Publishing Company, 19 Tribune building, Chicago, at prices so low as to leave no obstacle to its general adoption. Sample copies have been sent to all members of the associations represented by the joint committee. This standard contract is distinguished from every form which has preceded it by its completeness, its directness, its impartiality toward both owner and contractor and its freedom from the tautological repetitions so customary in legal documents. The language is simple and clear. This contract explicitly stipulates that all drawings, plans and specifications are the property of the architect. Changes are to be executed as ordered, and if a price cannot be agreed upon in advance, the work shall be done, nevertheless, and arbitration shall award just compensation later. Safe facilities must always be maintained for the architect's inspection of the work. The owner is made to agree that all material and labor which he is to furnish shall be so delivered as to cause no delay in the completion of the building. He is also to effect insurance during progress in the contractor's name as well as his own. Just provision is made for interruptions of the work by strikes and by "the unusual action of the elements."

IT is expected that the standard contract above referred to will speedily come into general use. Its origin and its official indorsement by the National Association of Builders, and by the two great national associations of architects, the American Institute and the Western Association, afford a conclusive guarantee of its value, and a powerful recommendation, while its cheapness puts it within the reach of all. As it is most desirable that the standard contract should come into general use at once, the fact of architects having a stock of other forms on hand should not influence them to continue their use. The standard form is the fairest contract yet framed, and likewise the most complete. Once familiar with its provisions, contractors and owners as well as architects will be likely to demand it in every case and to accept no other. Its general adoption will greatly promote the prompt, harmonious and satisfactory conduct of building operations, and tend to prevent the frictions, disagreements and controversies which arise more often through loosely drawn contracts than in any other way. The full text of the standard contract, with the circulars issued by the committees, is given in this number of THE INLAND ARCHITECT.

IN another column we print a circular from the Illinois State Association of Architects, proposing a protective organization for the defense of architects' legal rights. This circular is of the highest importance to every member of the profession, and we bespeak for it the prompt and serious consideration of our readers, and an early reply, so that the committee may proceed without delay. The necessity for this measure, and the aims and means proposed, are so fully and clearly set forth that hardly any comment is necessary further than to urge immediate coöperation. At the convention of

the Missouri State Association in Kansas City, last January, a similar measure was discussed and a committee appointed to devise a feasible plan of operations. The scheme, in brief, was to engage some competent lawyer to accept the title of association attorney—someone as familiar as possible with the legal status of architects in advance, and one who would thereafter keep himself specially informed as to all decisions in this particular line. Each member of the association might transmit to this committee any inquiry as to his legal rights or responsibilities, accompanying it with a moderate fee, to be fixed in advance, and he would receive a reply as the result of a conference of the committee with its attorney. Should a suit follow it would be undertaken by the committee, if desired, and if approved by them, in the name of the state association, and partly at its expense.

ONE result of the mutual defense scheme of the Missouri State Association would be to provide in advance an attorney, who, through the manner of his selection and through his subsequent studies, would, presumably, be better qualified than ordinary lawyers to understand and defend an architect's rights—an attorney who, for instance, would refrain from confounding architects with picture makers on the one hand, and with builders on the other hand; who would know better than to value an architect's services at so much per hour, just as he would the labor of a hod carrier, and who would be proof against the popular fallacy that if an owner finally concluded not to use the plans he had ordered, the architect should not expect pay for them. Another result, and an extremely important one, would be the enlightenment of architects themselves as to their own rights. In this respect, indeed, a large majority of our architects are but little in advance of the average lawyer to whom they look for legal defense. It is a case of the blind leading the blind. Not many years ago a cute lawyer got a self-styled architect to testify on the witness stand that the value of a set of drawings for a building could be determined by multiplying the number of hours it took to make them by the rate per hour that was paid to the draftsman. Now, if there were a committee always ready to receive legal inquiries and to return a reliable answer, all at an expense of only a few dollars, many an architect might be induced to inform himself, who is deterred at present from apprehension of the formidable retainers and other fees which he supposes a competent lawyer would exact.

SHOULD the protective league be successfully established in one state, others would rapidly follow, no doubt, in all the other states. While the ostensible aim of the league would be to provide for litigation, and while one object would be to encourage architects to defend their just claims by legal process, a very important result would be to promote the settlements by mediation and compromise, or by payment in full without resort to the courts. If backed by eminent legal talent, the decisions of the defense committee would have weight with owners as well as with architects; and after a very few years of success in the courts, the average owner would be likely at once to respect the committee's verdict, and pay without risking almost certain defeat and the costs of actual suit. On the other hand, should the committee's decision be unfavorable to an architect's claim, but few architects would have the hardihood to venture into court with it. The practical difficulties in the way of the scheme are somewhat numerous and serious, though it is to be hoped they are not insurmountable. How to find the lawyer, how to pay him, from what funds, and how raised; what arrangements to make for giving advice merely and for conducting

suits, appeals, etc. How to find a committee of busy architects who can and will give their time to such onerous duties, and how to compensate them; what plan of preserving and publishing the decisions obtained, etc. There are also difficulties in the way of inquiries from a distance. There are comparatively few people not lawyers who can make a statement of even a simple case on which an attorney can safely base a reply. Important facts will be omitted, and assumptions stated as facts, so that on a personal interview with a claimant the attorney may discover that the actual situation is precisely the reverse of what it had been described to be. Probably a personal interview by the attorney would be an indispensable preliminary to the institution of all suits by the defense league.

THE *Chicago Tribune*, recently, in representing, for perhaps the thousandth time, the "smoke nuisance" problem, introduced an integral which had hitherto been overlooked, but which, unhappily, was not by any means an unknown quantity to the building profession of the city, namely, its impingement upon architectural interests. The article in question cited a number of prominent buildings of recent construction that had become so begrimed and smoke-stained that all the architectural brightness was not only lost, but even the original color, texture and embellishments hidden under the many coatings of smoke residue, and in this connection the fact was pointed out, that architects are confined, in consequence, in their designing, to contemplate only the use of somber-colored material, and forced to forego all desire to display any genius or artistic taste they may have by the introduction of brighter material and more ornate ornamentation. But the above was not all of the impingement. It not only precludes the use of any but somber material, hampering, in that way, the skill and genius of architects, but assails, to its great injury, such material as is admissible by eating (through the consequent deposit of creosote) stone, paint and metal—not even copper being proof against its ravages, until buildings are made to crumble and decay before their time. What is true of Chicago in this respect is true of every other large city where manufacturing interests abound and quantities of bituminous coal are burned; therefore, the prevention of or consumption of smoke is a vital one to architects, and none the less so to the owners of buildings, to whom it is a matter of many dollars tribute annually levied upon them without law, justice or compensation by selfishness, indifference and carelessness. By the use of anthracite coal and coke unquestionably the evil can be abated, and although the various "smoke consumers" have not come up to the measure of expectation, yet some of them do well, and if honestly tried could do much toward mitigating the nuisance. Municipal laws have been enacted making it a finable offense to maintain fires that send out volumes of smoke, and it is greatly to the interests of both architects and owners that these laws should be rigidly enforced.

PRELIMINARY to the fourth annual exhibition of architectural drawings, etc., by the Architectural League of New York, the Executive Committee has issued a circular letter, giving notice that the exhibition will be opened on December 27, next. The length of time given for the preparation of works of art for exhibition should insure a thoroughly representative exhibit. The report of the Committee on Permanent Location is also interesting, and emphasizes what we have already said in regard to the desirability of each association, as soon as possible, possessing a habitation as well as a name.

Blue Printing.

BY FRED D. FOSS.

HAVING received a letter from a prominent architect of Omaha, asking for a formula for making "blue print paper and instructions for developing the same," I will allow the intended continuation of the articles on hydrochinon development to lapse and comply with the request, giving several formulas for working the process, and also the formula in use by myself.

Perhaps a few preliminary remarks may lead to a clearer understanding of the action of light upon paper sensitized with iron salts, so the result of Sir John Herschell's investigations will be given. "The double citrate of iron and ammonia is more readily acted upon by light than any of the other iron salts, the double oxalate of iron and potassium ranking next. (Printing with the latter has only an experimental value, so it will not be treated of in this article.) The law upon which the process of printing with salts of iron is based, is that the ferric salts are by the action of light reduced to the ferrous salts, which are capable of being acted upon by various toning agents, such as potassium ferrocyanide, chloride of gold, platonic tetrachloride, mercuric chloride, potassic bichromate, cupric chloride, and others. The developing solution most commonly employed is potassic ferrocyanide, and for its use two methods are adopted, one being to coat well-sized paper with the solution of the iron salt, dry, print, and tone on a solution of potassic ferrocyanide. The other and more convenient method is to coat the paper with a mixed solution of iron and ferrocyanide, and to fix the print in water. Should the first method be chosen, the following way may be adopted:

Citrate of iron and ammonia.....154 grains.
Water (distilled).....25 drams.

Apply this solution to the paper with a brush or sponge, or float the paper on it from one to three minutes. When dry, expose under the negative until a faint image is visible. For a blue print, immerse in a solution of potassium ferrocyanide one to ten (potassium ferrocyanide 1 ounce, water 10 ounces). When the image is fully developed or toned, wash thoroughly in water, adding a little citric or acetic acid to the first wash water. This will dissolve out all the soluble salts and leave the blue image unchangeable. If a purple image is desired, immerse the print in a neutral solution of chloride of gold (gold, 1 grain; water, 4 ounces; to which is added a few drops of a saturated solution of bicarbonate of soda). The reduction of the gold takes place according to the law that the ferrous salts reduce salts of gold to the metallic state. To fix the pictures they are immersed in a bath of dilute hydrochloric acid and then thoroughly washed in water. This process gives the once famous chrysotype. Other tones may be produced by immersing the prints in a very dilute solution of platonic tetrachloride, mercuric chloride, cupic chloride, or potassic bichromate of about the same strength as the gold solution mentioned above, always using the acid bath, followed by copious washing. These methods give very pleasant results and are worthy the attention of architects who desire to reproduce their plans or drawings. Pure chemicals, water and paper should be used if permanency of prints and good results are desired. Longer exposure will be found necessary with the salts of gold, platinum, etc., than when the ferrocyanide is employed. An interesting method of developing prints for paper prepared with the double salt of iron and ammonia is to float on a 40-grain solution of silver nitrate to which a few drops of gallic acid or acetic acid have been added. The silver nitrate is reduced to the metallic state by the ferrous salt, and the metallic silver is deposited where the ferrous salt was present. The gallic acid causes a further reduction of silver, and an image in metallic silver is formed, which is presumably permanent. We now come to the more usual method of using the citrate of iron in conjunction with the ferrocyanide, thus uniting sensitizer and developer. This process has simplicity to recommend it, and when at its best gives very charming results. But to insure the highest degree of excellence in blue prints, the following points must be carefully attended to:

1. The chemicals should be of the best.
2. The paper must be free from deleterious matter.
3. A few grains of bromide of potassium should be added to the mixed solutions to confer greater keeping, however, to the paper and to add to the density of the prints.
4. The first wash water should contain a little citric or hydrochloric acid, and the after washings in plain water should be most thorough.
5. The paper must be sensitized in a dim light — gaslight is safe — or pure whites will be unknown.
6. The paper should be sized. Albumen coagulated by heat is undoubtedly the best sizing, but the following arrowroot sizing will be found good: 154 grains of arrowroot rubbed up with cold water, then poured into 25 ounces of boiling water, and 6 ounces of alcohol added. Float the paper on this solution for two or three minutes, and suspend to dry by

the end which left the solution last, in order to equalize the coating. Plain sized paper can, however, be purchased from Douglass' photographic stock house, which will answer all purposes. Good blue prints can be made without attention to these details, but all the capabilities of the process will show themselves only when they are observed, and bear in mind the old maxim: "What is worth doing is worth doing well."

Obtaining Commissions.*

BY ARCHITECT J. W. YOST.

THE object of this paper is a discussion of the methods in use for obtaining professional work.

In general, there are two classes of clients — those who come to us and those whom we seek. The former class of clients — here's to their health, long life, great prosperity and wonderful increase — this paper bids them godspeed and a good-day. The latter class includes a much larger portion of our clientele than it is pleasant to contemplate. In what way can it be diminished, and the expense of seeking work reduced?

Let us examine some of our practices and see if we would not be as well off if we abandoned or changed a few of them. Where there is work of a desirable nature which does not come to us, we either call, write or send for the purpose of obtaining it. The first object of the call or correspondence is to secure the work forthwith. If it can be thus obtained, at proper compensation, it comes sufficiently near the unsought work to need no further mention here. Our troubles would be few if all the work went to the first applicant. The anxiety to be *first* might be intense for a time, but it would be soon over.

It is probable that when we call, send or write, we learn that some other architect has done the same thing, or is expected to. Perhaps several have already informed the parties of their desire to be architects of the proposed structure. It may be that it has already been a determination to have suggestions or designs from different applicants — possibly a competition.

It is probably a rule with few exceptions, if the architect believes his chance would be improved thereby, that he suggests a competition. Any one will get the work without a competition if he can, but when he finds that it cannot be thus secured, what is he to do? If he believes himself an architect superior in ability, so far as that particular building is concerned, and yet feels that he is at a disadvantage as far as influence goes, what is to prevent him suggesting a competition? At first sight it appears to be his duty to do so. Is he to deliberately allow a rival to outreach him without making his greatest effort and putting his "best foot" forward? He can, perhaps, by means of a competition, outreach his rival's influence or acquaintance, with a brilliant or novel design, or, by thus gaining time, he may find some way to bring to bear some influence to balance the acquaintance of his competitor.

But what is the result of competition under the supposed circumstances? Nobody gains anything and everybody loses by it. The inferior architect whose influence was feared, as a rule, wins the competition, and both are losers by reason of the competition to the extent of the cost of sketches.

While I know it is difficult to believe, it nevertheless is true, that personal influence decides nine out of every ten competitions *where the competitors are known*.

I believe I have engaged in as many competitions, before as varied a clientele, and for as many different kinds of buildings, as anyone of my age, and I am willing to say of such competitions, that nine out of every ten, of not only those I have engaged in, but of all others I have observed, have been determined outside of the merits of the designs submitted. I say this, too, without casting any reflection upon either my competitors, myself or our clients.

Those to whom we submit designs are not, as a rule, much posted in regard to architectural drawings, and it is a part of human nature to pay attention to and believe a friend rather than a stranger; and where there is not the slightest intention of being unfair this very quality enables men to take hold of what is presented with influence and acquaintance rather than that which stands alone upon the merit it contains. This same element of human nature is illustrated in the attachment of successive generations of the same family to the same church or political party.

Competitive designs do not usually differ so much in quality that the difference in merit of the various plans can be detected by an unprofessional eye, and made sufficiently clear to be unquestionable; and I am not sure that it would be greatly better if an expert were to render the decision, provided he is intimately acquainted with one competitor and the other is unknown. He who cannot secure work without competition will seldom find himself better off after a competition he institutes to gain it. We are likely to gain nothing through competitions of our own making.

A procedure which will be as well for all of us and for each of us, and often avoid unnecessary expense, one which has been frequently adopted by public authorities and often by individuals, is something like the following:

When different architects apply, or are desired to apply, or be furnished an opportunity to apply for a commission upon any proposed building, let a time be set when each or all applicants will be heard, giving each one an opportunity of presenting for examination whatever he may have to offer, which he believes will tend to satisfy the proposed client that he is the proper person for employment. He need not present drawings at all unless he wishes to; or, if he does, he is not required to go to the expense of preparing drawings for that particular building unless he chooses. Let it be understood that whoever is *employed* is to prepare suitable drawings *afterward*. In short, let an architect be selected rather than a plan adopted.

I am confident this will be found the better way. It will effect the end desired by both public officers in charge of building enterprises — that of

* Paper prepared for the third annual convention of the Association of Ohio Architects, held at Cleveland, August 16, 1888.

being fair to everybody and giving all an equal opportunity—and will afford to all who desire to apply an equal opportunity without requiring any expense, except what each one, for himself, chooses to make. The adoption of this method will very greatly reduce the number of competitions, in fact, will surely benefit both client and architect.

It is seldom, indeed, that sketches presented in competition are carried into execution without first being changed to meet requirements unknown, and too numerous to be made known, to the architects in the competition, so that competitions do not succeed in securing a building plan. The only thing really accomplished is the giving of all an equal chance, which as aforesaid can be as well done without their delay and expense. This is, of course, not meant to cover those works of great importance, where a comparison of ideas is highly desirable, and where no man's reputation or experience is sufficient guarantee of his satisfactory solution of the problem.

The great majority of competitions of an unnecessary character, while it may be perceptibly reduced by carrying out the suggestion I have made, will in some quantity be with us despite our protests. Not all people will at once give us what to them is an inexpensive amusement—that of looking over the suggestions—sketches of a number of different architects—all striving to solve most satisfactorily the same problem. While it is kept up by the public for its information or entertainment, it ought not to be at the expense of the profession.

If people will indulge themselves in the pleasure of having a number of suggestions for the same building, they ought to pay for the fun. The public ought, by the most practical means, to be taught that this sport is expensive to somebody. Architects cannot live on competition work done at the same rate as for work where no such expense is necessary, and the general business of the profession ought not to be loaded with the financial embarrassments induced by competitive work. We ought to make that class of work pay its own way. A fair compensation for competitive sketches will not fall below one per cent of the cost of the proposed structure.

The five per cent rate for professional work ought, in all fairness to all parties concerned, to be increased to six per cent for work gained in competition. Our schedule of charges ought to be amended to that effect. This will put the expense of the competition where it belongs.

It will, when known to be the rule of the profession, cause many to hesitate before indulging in such a luxury. I dare say it would nip in the bud three-fourths of all the competitions we would otherwise be unable to avoid.

Competitions are proper in their place, and are useful for certain important purposes; but the burden of such even as are desirable should not be borne by the profession, and I am satisfied that the public will have little to do with most of them when it learns their real cost and is obliged to pay it.

Serious Building Accident.

EARLY on the morning of August 22 the lofty tower and spire of the new Church of the Covenant, at the corner of Seventeenth and N streets, Washington, D. C., collapsed and sank in ruins without apparent cause except inherent inability to stand up any longer. The accident occurred before daylight, and, consequently, when no workmen were present, and the streets adjacent were deserted. The disintegrated tower telescoped itself so completely that the debris is said not to have extended beyond the sidewalk at its base. There were but two witnesses, the watchman and a policeman. After a few admonitory warnings, they saw a section of the front wall of the tower twenty feet high fall out into the street. For a few moments the tall spire above swayed and trembled, then sank vertically down, crumbling as it fell, and carrying with it the front wall of the church and a large portion of its roof.

The architect and superintendent was Mr. J. C. Cady, of New York, a gentleman of eminent standing and of wide experience. At the time of the accident, Mr. Cady was en route from New York to Washington, to give final directions about the interior painting, the church being so nearly completed that the organ and pews would have been put in a week later. The contractor was Mr. Wm. C. Morrison, of Washington.

The church walls, including the tower, were of the Seneca bluestone from the upper Potomac, veneered with buff Ohio sandstone. The bluestone was ordinary rubble, and it is said the stones were small and ill-shaped, and that the mortar used, after several months of hardening, can now be crushed with the fingers like dried mud. The tower was 138 feet high, and the weight of the upper part rested chiefly on three piers between the entrance arches of the first story.

The architect says these piers were amply strong to support ten times the load they carried, and he hints at quicksand beneath the footings as a possible explanation. The contractor says the southwestern pier was too weak for its load, and that its failure caused the fall of the tower. He adds that he discovered signs of weakness in this pier a month before the accident, and notified the architect thereof, also the city building inspector, but both parties agreed that there was no danger. The building inspector says the walls were abundantly thick, and charges the disaster to insufficient bonding of the masonry. He thinks the walls split through the center.

An official investigation is to be made as soon as possible. The cost of the church was to be \$130,000. The damage is variously estimated at from \$15,000 to \$30,000. This accident furnishes a new refutation of the popular fallacy that municipal inspection is a safeguard against dangerous building construction.

THE beauty and excellence of vari-colored hard woods in interior decoration is too well understood among architects to need particularizing; whether it be used as a simple finish, in framing, in borders, wainscoting, or inlaid floors. Among the largest dealers in the United States, in this specialty of interior decoration, is the firm of E. B. Moore & Co., of this city, whose card can be found in this journal, and from whom much interesting information concerning the same can be learned by a correspondence with the firm.

The Convention of Ohio Architects.

THE third annual convention of the Association of Ohio Architects was called to order at the Stillman House, Cleveland, Ohio, August 16, at 8 P.M., President C. F. Schweinfurth in the chair.

The minutes of the last annual meeting, having been published in THE INLAND ARCHITECT and sent to every member, their reading was dispensed with.

The roll was called and the following is the full list of members, those who answered to their names being marked with a *:

Geo. W. Kramer, F. O. Weary,* Akron; Guy Tilden,* Canton; Chas. B. Cook, J. F. Cook, Chillicothe; W. M. Aiken, Edwin Anderson, Wm. R. Brown, Edwin Buddemeyer, Chas. Crapsey, S. E. Des Jardines, Gustave Drach, Walter R. Forbush, W. W. Franklin, L. Green (removed to Anniston, Ala.), S. Hannaford, J. W. McLaughlin, A. C. Nash, L. F. Plympton, Geo. W. Rapp, T. E. Richter, E. G. Reuckert, D. S. Schureman, H. E. Siter, J. S. Trowbridge (deceased), Cincinnati; C. O. Arey,* F. C. Bate,* F. S. Barnum,* F. A. Coburn,* F. E. Cudell,* John Eisenmann, J. N. Richardson,* Edward Schwabe, C. F. Schweinfurth,* A. M. Smith, Cleveland; J. M. Freese,* S. J. Hall, J. T. Harris, E. W. Hart, J. A. Kremer, H. A. Linthwaite, G. H. Maetzel, C. A. Stribling, J. W. Yost,* Columbus; S. R. Burns, F. J. Otter, Luther Peters, C. I. Williams,* Dayton; M. Reutti, Hamilton; N. B. Bacon, Bernard Becker, E. O. Fallis, D. L. Stein, Toledo; T. K. Hewitt, Tiffin; L. Boucherle, W. B. Ellis, A. Kanengeiser, Herman Kling, C. H. Owsley,* Youngstown; H. C. Lindsay,* Zanesville. Honorary member, R. C. McLean,* Chicago, Ill.

The report of the treasurer, showing a balance on hand of \$90.20, was read and accepted.

A resolution was offered to appoint a committee of three to nominate officers for the ensuing year and to suggest the place for holding the next annual meeting.

F. S. Barnum, C. I. Williams and Guy Tilden were appointed as such committee.

A recess of fifteen minutes was taken to allow the members an opportunity to pay dues.

After recess, the Executive Committee reported the election of the following new members: A. O. Elzner, of Cincinnati; Geo. H. Smith, of Cleveland; Robt. E. Dexter, of Dayton; and John H. Boll, of Cincinnati.

The case of S. J. Hall, referred to the Executive Committee at the last meeting, was considered, and in consideration of his purpose to take no more contracts for building he was held to be worthy to continuation in membership.

The bills of the secretary for printing and stamps, amounting to \$30, were approved and ordered paid.

On motion, the report of the Executive Committee was adopted.

The president called for a report from the Committee on the Formation of Chapters, and the several vice-presidents reported as follows:

Mr. Barnum: I wish to report, sir, that there have been quite serious efforts made to form a chapter in Cleveland, but without success so far. I think, however, before we meet again a year from now that it will be reported that there is a chapter formed in Cleveland and in active operation.

Mr. Williams: I have nothing special to report, only that we have an increased membership in Dayton now, and propose to form a chapter, which we will make an attempt to do the coming year, when I hope to be able to report at the next annual meeting that such a chapter has been formed.

The President: Let us listen to the reading of the report of the Committee on Statutory Revision and Law for Licensing Architects.

The report was read by the secretary, as follows:

Your committee would beg leave to submit the following report:

While the statutes of Ohio are probably as good as those of other states, so far as they regulate the matter of erecting public buildings and so far as they govern the construction of buildings in cities, there is, nevertheless, much to be done to make them as complete in every respect as could be desired.

Within the last year a new law for inspecting and constructing buildings has been passed, applying to the city of Cincinnati. It is believed that this statute will prove by test to be a decided improvement on the one which it supersedes. The building law applicable to Cleveland was passed about a month later.

No great improvement in the general laws of the state has been made, but an act has been passed correcting certain conflicts of language contained in Section 794, and some additional provision has been made in regard to the letting of contracts for county work.

It was believed when this statute was drawn that it would cover all public work. It was learned, however, since that another one must be enacted in order to correct a few objectionable features in the laws relating to the construction of school and other city buildings. If possible, this will be effected during the coming session of the legislature.

During the year past several accidents have occurred by reason of unsafe construction of buildings and by reason of using buildings for purposes for which they were not intended.

There is no general statute to control the method of constructing buildings for public use which is sufficiently explicit to be of any practical use. It is believed that something of this kind is greatly needed.

A bill has been drawn up for presentation to the legislature, the object of which is to prevent hereafter the construction of dangerous buildings for public use. This bill will be presented for consideration of the legislature at its coming session. Copies of it are now in the hands of members of the legislature for examination.

In regard to the law for licensing architects, nothing of a definite character has been accomplished, and from present appearances it will require considerable time to secure an enactment in exact conformity to the one proposed.

Members of the legislature to whom the matter has been presented say there will be much objection raised on account of its apparent interference with the rights of people to do what they please. And while it is admitted it is only asking the same for the profession of architects that now exists for the professions of law and medicine, yet it will require time to convince a sufficient number of our representatives that there is a public demand for such a measure.

The only thing we can do is to work in the direction of the end to be desired, and make such progress as we can from time to time.

The bill which it is proposed to present to the coming session of the legislature relating to the construction of dangerous buildings will, it is believed, have a great tendency to accomplish the desired end, so far as public buildings are concerned.

It will probably be some years before any action is taken to prevent private buildings being placed in the hands of whoever the individual chooses to select.

Respectfully submitted, (Signed) J. W. Yost, Chairman.

The President: I think it would be a good idea for our vice-president from Cleveland to report on our building law.

Mr. Barnum: Well, I can only say that we succeeded in getting the law, which was the revised law of Cincinnati, passed, with the exception

of the part applying to plumbing, which seemed to conflict with existing city ordinances. The balance of the law we have now in operation in Cleveland.

The President: We will listen to the report of the Committee on Entertainment of the Western Association at Cincinnati.

The report of the above committee was read by Mr. F. O. Weary. It showed an expenditure of \$548.50, a dividend of \$288.50 on amounts collected from Ohio architects, and an average attendance of 75 to 80 members.

The report was received, and referred to the Executive Committee.

The President: The report of the Executive Committee on nominations being next in order, the report of that committee was called for by the chair.

Mr. Barnum: Your Committee on Nominations have to report the nomination of two tickets and the suggestion of two places of meeting next year. One ticket that we have made suggests, in the first instance, the place of meeting at Dayton, with Mr. C. I. Williams as president, and for vice-presidents, F. E. Cudell, Cleveland; W. R. Forbush, Cincinnati; E. O. Fallis, Toledo; C. H. Owsley, Youngstown, and J. M. Freese, Columbus. For secretary, F. J. Otter, Dayton; treasurer, H. C. Lindsay, Zanesville; executive committee, C. F. Schweinfurth, Cleveland; Chas. Crapsey, Cincinnati, and Guy Tilden, Canton.

The other ticket suggests the place of meeting as Put-in-Bay, with Mr. J. W. Yost as president; vice-presidents the same as on the other ticket; secretary, H. A. Linthwaite; treasurer, the same as the other ticket; executive committee, the same.

On motion of Mr. Coburn, the election of officers was first proceeded with, the choice of a place for holding the next annual meeting to be balloted for afterward.

The result of the vote showed the election of the ticket headed by Mr. C. I. Williams.

On motion, the election of all the officers named in the ticket headed by Mr. C. I. Williams was made unanimous.

On motion of Mr. Weary, seconded by Mr. Yost, Dayton was selected as the place for the holding of the next annual meeting.

On motion, the convention adjourned, to meet at Dayton on the third Thursday in August, 1889.

CONVENTION NOTES.

THE small attendance upon the annual meeting suggested strongly the colored gentleman's comment and apology upon viewing the very small turkey provided for the family Christmas dinner: "De breed am small but de flavor am delicious." The attendance was not large in numbers, but was in every way representative.

THOSE who went to Put-in-Bay on the steamer City of Cleveland, were entirely lost en route, as there were more than two thousand excursionists on board. Through the courtesy of that popular gentleman, Mr. Dugal McLaughlin, the captain of the steamer, the press representatives enjoyed the trip from the pilot house and hurricane deck. This steamer is one of the finest examples of marine architecture on the lakes, and from cut-water to stern post, from keel to hurricane deck is elegantly proportioned and finely finished. Captain McLaughlin is a perfect seaman, and the floating palace could not be in the care of a more thoroughly efficient master.

THAT the best work of an architect is that which, when executed, shows least that he has tried to do something brilliant, was forcibly illustrated to a few of the members who, at the invitation of President Schweinfurth, drove out to the driving park and stopped at the Roadside Club House. This building is small, but one of the most effective pieces of club-house work to be found in any city. The superb dinner, provided by the steward of the club, would have been sufficient excuse for any amount of enthusiasm, but the above is the general verdict, and was rendered before the repast and accompanying good cheer had warmed the hearts of the visitors. Mr. Schweinfurth has designed some fine residences in Cleveland, but visitors will remember this little club house as his best work.

IT might not be fair to Michael Angelo or to Architect Levi T. Scofield to draw comparisons, but the latter gentleman looked the sculptor when we saw him in his studio, modeling the figures for the groups for his soldiers' and sailors' monument. Members of the institute would have been delighted to have seen him in workman's clothes, chisel in hand, chipping the shell from a plaster cast, working the clay, or in other ways aiding in the work of preparing these groups for the bronze casts. Beside his ability as an artist, Mr. Scofield is a thorough soldier, and these groups, through their absence of the ideal and their accurate portrayal of natural attitudes and natural circumstances, will doubtless be the most noted groups of statuary in this country, and exercise a strong influence on future work of American sculptors. The work will occupy two years.

THE banquet at the Stillman was in every way enjoyable. Mr. Schweinfurth presided, with President-elect Williams on his right, and the gentleman who was defeated for that office at the other end of the T square. There may be other hotels in Cleveland, but the Stillman has no superior in any western city, in general comfort, attendance and table service. It is also fireproof.

THE press was represented by but two journals, the *American Builder*, of Cleveland, and *THE INLAND ARCHITECT*. Mr. Houghton, editor and proprietor of the *American Builder*, is a gentleman it is a pleasure to know, and being a newspaper man (not a "journalist") he is not only understands what a paper should be, but is ambitious to make his journal valuable and progressive. He is sure to succeed. Architects can help him by sending him drawings.

"GILBERTSON'S OLD METHOD" roofing tin has been specified by the architect of the new Baltimore & Ohio depot at the foot of Smithfield street. One thing certain, the coming generation are sure of a good roof from rain and storm while waiting for trains at the B. & O.—*The Builders' Gazette*, Pittsburgh, Pa., August 15, 1888.

The Uniform or Standard Contract.

THE full text is here given of the standard form of contract adopted by the joint committee appointed for the purpose. The explanatory circulars issued by them and by the special committee of the National Association of Builders are also given:

CIRCULAR OF THE COMMITTEE OF CONFERENCE OF THE AMERICAN INSTITUTE OF ARCHITECTS, THE WESTERN ASSOCIATION OF ARCHITECTS, AND THE NATIONAL ASSOCIATION OF BUILDERS, ON A STANDARD FORM OF CONTRACT.

DEAR SIR: The Committee of Conference on a standard form of contract, appointed at their last annual conventions by the several associations above named, beg leave to present the accompanying specimen copy of such contract as the result of their united labors in that behalf, and respectfully ask its adoption by you in your practice.

The object sought to be obtained by the committee was to prepare a form of contract which could be received and adopted generally by architects and builders as a standard form, and in which the several provisions necessary to constitute an equitable agreement, as between the owner and the builder, would be incorporated. The joint committee were empowered by their respective associations to prepare and adopt such a form of contract, and this work, as embodied in the accompanying printed copy, may be said to be the authorized standard form of said associations.

The action of the committee in this regard was as follows: After an exchange of views through correspondence, an arrangement was made to have the committee meet in the City of New York. Accordingly such a meeting took place on the 6th of June ult., and an organization was effected by electing a chairman and secretary. This meeting was adjourned from day to day—daily sessions and one evening session being successively held—until the labors of the committee were essentially completed. The matter was then referred to a sub-committee, consisting of the chairman and secretary of the joint committee, to revise the manuscript for publication. It was afterwards submitted individually to the several members of the committee, subjected again to another revision, and finally adopted as printed.

In order to preserve the form from errors, alterations or interpolations, it has been copyrighted. It is the general intention of the members of the National Association of Builders to have it understood that in all cases where proposals for any work are submitted by them, such proposals are made with the understanding that the contract made upon this standard form is the one that is to be executed by them upon such proposals.

THE INLAND PUBLISHING COMPANY, 19 Tribune building, Chicago, Ill., has been licensed to publish the blanks, and any number of copies, with prices, etc., can be obtained from them on application. The blanks will be furnished at \$1.10 per 100, \$4.25 per 500, and \$8.00 per 1000, free by mail or express. Architects can have their names and the consequent pronouns inserted, as they may order, at small additional cost.

The members of the committee of conference, appointed by their several associations, are as follows:

- OF THE
AMERICAN INSTITUTE OF ARCHITECTS.

OF THE
WESTERN ASSOCIATION OF ARCHITECTS.

OF THE
NATIONAL ASSOCIATION OF BUILDERS.
- { O. P. HATFIELD, New York, N. Y.
ALFRED STONE, Providence, R. I.
J. H. WINDRIM, Philadelphia, Pa.
S. A. TREAT, Chicago, Ill.
W. W. CLAY, Chicago, Ill.
J. F. ALEXANDER, Lafayette, Ind.
JOHN S. STEVENS, Philadelphia, Pa.
GEORGE C. PRUSSING, Chicago, Ill.
JOHN J. TUCKER, New York, N. Y.

O. P. HATFIELD, Chairman.
- WM. H. SAYWARD, Secretary,
164 Devonshire St., Boston, Mass.
New York, August 8, 1888.

CONTRACT.

FORM OF CONTRACT
ADOPTED BY THE JOINT COMMITTEE OF THE
AMERICAN INSTITUTE OF ARCHITECTS,
THE
WESTERN ASSOCIATION OF ARCHITECTS
AND THE
NATIONAL ASSOCIATION OF BUILDERS.

THIS AGREEMENT, made the day of
..... in the year one thousand..... hundred and
by and between.....
..... part of the first part
(hereinafter designated the Contractor), and.....
..... part of the second part
(hereinafter designated the Owner).

Witnesseth that the Contractor, being the said part of the first part, in consideration of the covenants and agreements herein contained on the part of the Owner, being the said part of the second part, do covenant, promise and agree with the said Owner, in manner following, that is to say:

1st. The Contractor shall and will well and sufficiently perform and finish, under the direction, and to the satisfaction of..... Architect (acting as Agent of said Owner), all the work included in the.....

agreeably to the drawings and specifications made by the said Architect, and signed by the parties hereto (copies of which have been delivered to the Contractor), and to the dimensions and explanations thereon, therein and herein contained, according to the true intent and meaning of said drawings and specifications, and of these presents, including all labor and materials incident thereto, and shall provide all scaffolding, implements and cartage necessary for the due performance of the said work.

2d. Should it appear that the work hereby intended to be done, or any of the matters relative thereto, are not sufficiently detailed or explained on the said drawings, or in the said specifications, the Contractor shall apply to the Architect for such further drawings or explanations as may be necessary, and shall conform to the same as part of this contract, so far as they may be consistent with the original drawings, and in event of any doubt or question arising respecting the true meaning of the drawings or specifications, reference shall be made to the Architect, whose decision thereon, being just and impartial, shall be final and conclusive. It is mutually understood and agreed that all drawings, plans and specifications are and remain the property of the Architect.

3d. Should any alterations be required in the work shown or described by the drawings or specifications, a fair and reasonable valuation of the work added or omitted shall be made by the Architect, and the sum herein agreed to be paid for the work according to the original specification shall be increased or diminished as the case may be. In case such valuation is not agreed to, the Contractor shall proceed with the alteration, upon the written order of the Architect, and the valuation of the work added or omitted shall be referred to three (3) Arbitrators (no one of whom shall have been personally connected with the work to which these presents refer), to be appointed as follows: one by each of the parties to this contract, and the third by the two thus chosen; the decision of any two of whom shall be final and binding, and each of the parties hereto shall pay one-half of the expense of such reference.

4th. The Contractor shall, within twenty-four hours after receiving written notice from the Architect to that effect, proceed to remove from the grounds or building all materials condemned by....., whether worked or unworked, or take down all portions of the work which the Architect shall condemn as unsound or improper, or as in any way failing to conform to the drawings and specifications, and to the conditions of this contract. The Contractor shall cover, protect and exercise due diligence to secure the work from injury, and all damage happening to the same by neglect shall be made good by.....

5th. The Contractor shall permit the Architect, and all persons appointed by the Architect, to visit and inspect the said work or any part thereof, at all times and places during the progress of the same, and shall provide sufficient, safe and proper facilities for such inspection.

6th. The Contractor shall and will proceed with the said work, and every part and detail thereof, in a prompt and diligent manner, and shall and will wholly finish the said work according to the said drawings and specifications, and this contract, on or before day of..... in the year one thousand..... hundred and..... (provided that possession of the premises be given the Contractor, and lines and levels of the building furnished him, on or before

the.....day of.....in the year one thousand
.....hundred and.....), and in default thereof the
Contractor shall pay to the Owner.....dollars for every
day thereafter that the said work shall remain unfinished, as and for liquidated damages.

7th. Should the Contractor be obstructed or delayed in the prosecution or completion of the work by the neglect, delay or default of any other contractor; or by any alteration which may be required in the said work; or by any damage which may happen thereto by fire, or by the unusual action of the elements, or otherwise, or by the abandonment of the work by the employés through no default of the Contractor, then there shall be an allowance of additional time beyond the date set for the completion of the said work; but no such allowance shall be made unless a claim is presented in writing at the time of such obstruction or delay. The Architect shall award and certify the amount of additional time to be allowed; in which case the Contractor shall be released from the payment of the stipulated damages for the additional time so certified and no more. The Contractor may appeal from such award to arbitrators constituted as provided in Article 3d of this contract.

8th. The Contractor shall not let, assign or transfer this contract, or any interest therein, without the written consent of the Architect.

9th. The Contractor shall make no claim for additional work unless the same shall be done in pursuance of an order from the Architect, and notice of all claims shall be made to the Architect in writing within ten days of the beginning of such work.

10th. The Owner agree to provide all labor and materials not included in this contract in such manner as not to delay the material progress of the work, and in the event of failure so to do, thereby causing loss to the Contractor, agree that

will reimburse the Contractor for such loss; and the Contractor agree that if shall delay the material progress of the work so as to cause any damage for which the Owner shall become liable (as above stated) then shall make good to the Owner any such damage—over and above any damage for general delay herein otherwise provided; the amount of such loss or damage, in either case, to be fixed and determined by the Architect, or by arbitration, as provided in Article 3d.

11th. The Owner shall effect insurance on said.....work, in his own name and in the name of the Contractor, against loss or damage by fire, in such sums as may from time to time be agreed upon with the Contractor, the policies being made to cover work incorporated in the building, and materials for the same in or about the premises, and made payable to the parties hereto, as their interest may appear.

12th. Should the Contractor at any time refuse or neglect to supply a sufficiency of properly skilled workmen, or of materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the agreements on part herein contained, such refusal, neglect or failure being certified by the Architect, the Owner shall be at liberty, after three days' written notice to the Contractor, to provide any such labor or materials, and to deduct the cost thereof from any money then due or thereafter to become due to the Contractor under this contract; and if the Architect shall certify that such refusal, neglect or failure is sufficient ground for such action, the Owner shall also be at liberty to terminate the employment of the Contractor for the said work and to enter upon the premises and take possession of all materials thereon, and to employ any other person or persons to finish the work, and to provide the materials therefor; and in case of such discontinuance of the employment of the Contractor he shall not be entitled to receive any further payment under this contract until the said work shall be wholly finished, at which time, if the unpaid balance of the amount to be paid under this contract shall exceed the expense incurred by the Owner in finishing the work, such excess shall be paid by the Owner to the Contractor, but if such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expense incurred by the Owner as herein provided, either for furnishing materials or for finishing the work, and any damage incurred through such default, shall be audited and certified by the Architect, whose certificate thereof shall be conclusive upon the parties.

13th. And it is hereby mutually agreed between the parties hereto that the sum to be paid by the Owner to the Contractor for said work and materials shall be.....

subject to additions or deductions on account of alterations as hereinbefore provided, and that such sum shall be paid in current funds by the Owner to the Contractor in installments, as follows:

It being understood that the final payment shall be made within.....days after this contract is completely finished; provided, that in each of the said cases the Architect certify in writing that all the work upon the performance of which the payment is to become due has been done to satisfaction; and provided further, that before each payment, if required, the Contractor shall give the Architect good and sufficient evidence that the premises are free from all liens and claims chargeable to the said Contractor; and further, that if at any time there shall be any lien or claim for which, if established, the Owner or the said premises might be made liable, and which would be chargeable to the said Contractor, the Owner shall have the right to retain out of any payment then due or thereafter to become due, an amount sufficient to completely indemnify against such lien or claim, until the same shall be effectually satisfied, discharged or canceled. And should there prove to be any such claim after all payments are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging any lien on said premises, made obligatory in consequence of the former's default.

14th. It is further mutually agreed between the parties hereto that no certificate given or payment made under this contract, except the final certificate or final payment, shall be conclusive evidence of the performance of this contract, either wholly or in part, against any claim of the owner, and no payment shall be construed to be an acceptance of any defective work.

15th. And the said Owner hereby promise and agree with the said Contractor to employ, and hereby employ to provide the materials and to do the said work according to the terms and conditions herein contained and referred to, for the price aforesaid, and hereby contract to pay the same at the time, in the manner and upon the conditions above set forth.

16th. And the said parties for themselves, their heirs, executors, administrators and assigns, do hereby agree to the full performance of the covenants herein contained.

In witness whereof, the parties to these presents have hereunto set their hands and seals, the day and year first above written.

In presence of.....

CIRCULAR OF SPECIAL COMMITTEE OF THE NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES.

Among the earliest and most important matters brought before the National Association of Builders for its consideration was the question of "Uniform Contracts," and at its first convention, held at Chicago, in March, 1887, a resolution was adopted to the following effect, namely:

1. That it would be greatly to the advantage of interested parties if all blank forms of building contracts were uniform throughout the United States.

2. That such forms should be very carefully framed, in order that the interests of both owner and builder should be properly protected.

3. That the proper method to produce a document that would be practical and complete, and secure its general adoption when formulated, should be through the coöperation of the three bodies representing most comprehensively the parties at interest, namely, the National Association of Builders, the American Institute of Architects and the Western Association of Architects.

Following out the suggestions of this resolution, a "Special Committee" was appointed early in 1887, and instructed to take such steps as seemed most advisable. This committee held several conferences with the American Institute and Western Association, the final result of which was the appointment of special committees by both societies, to meet in joint conference with the committee of the National Association.

These committees were severally given authority to act in the matter on behalf of their respective associations, and to adopt a form of contract which should be known as the form approved by the three associations referred to.

The "joint committee" thus appointed and authorized at once entered upon its duties, and after much preliminary correspondence its members met in executive session in the city of New York, and completed the work which had been delegated to them.

The result is conveyed to the individual members of the three bodies in the accompanying "specimen copy" of the form adopted, together with a "circular statement" of the joint committee.

The Special Committee of the National Association of Builders desires to call the particular attention of every member of that body to the importance and significance of the end accomplished.

This is the consummation of a much agitated measure, and one which for many years has been anxiously desired by architects as well as builders.

We now have a form which may properly be required by either builder or owner, it being the *joint product of the two interests through their regularly organized associations*—associations which represent in their membership *all sections* of the country.

This form may be demanded by either owner or builder as the proper basis of agreement, and (it being the usual and customary form, the provisions of which they will have had opportunity to become thoroughly familiar with) any alterations, emendations or additions may quickly be discerned and considered by either party *before signing*, they having the surety constantly before them that the copyrighted form as *printed* protects both their interests as comprehensively as possible.

It is hoped that builders will aid in establishing this form by requiring its use in all contracts they may be called upon to sign.

Congratulating the members of the National Association upon the success which has attended this effort to aid, assist and protect builders throughout the country, the committee respectfully submits that the advantage gained in this one direction is worth all the time, pains and expense which has been devoted to the association since its formation, and takes this opportunity to express the hope that every member will feel fresh interest in all its undertakings, and encourage the formation of filial bodies in such cities as are not at present represented, in order that future work may be still more representative and effectual.

EDWARD E. SRIENER, St. Paul, Minn.
JOHN S. STEVENS, Philadelphia, Pa.
JOHN J. TUCKER, New York, N. Y.
GEORGE C. PRUSSING, Chicago, Ill.

Special Committee on Uniform Contracts.

WM. H. SAYWARD, Secretary, Boston Mass.

Protective Organization.*

DEAR SIR,—In pursuance of a request from the Illinois State Association of Architects, Mr. L. H. Sullivan, of Chicago, has kindly put in form the substance of a recent discussion upon the advisability of "protective organization." The Executive Committee of the Association take pleasure in fully indorsing the views as herein given, and, in commending them to your consideration, earnestly request such coöperation as you may deem it expedient to give them in the matter as placed before you.

S. A. TREAT,
WILLIAM W. CLAY,
F. BAUMANN,
ALFRED SMITH,
J. L. SILSBEE,

Executive Committee I. S. A. A.

CHICAGO, August 1, 1888.

It is a fact, of daily increasing gravity, that the status of the architect, in its aspect of pecuniary responsibility, is vague to a degree which justifies and indeed necessitates a large prudence and forethought of organization for our common defense.

The interests centering in the erection of buildings are now so complex that questions of very delicate nature not infrequently arise, the adjustment of which is fraught with anxiety and hazard, because of the lack of that guidance which higher court decisions would supply.

It may therefore happen that the architect, through uncertainty, through fear of powerful opposition and the distress of long and expensive litigation, and, above all, shrinking from the thought of malignant and reckless cross-examination in the lower court, waives what he may believe his rights and suffers often an undue and burdensome taxation, which, it is easy to perceive, may in some cases amount practically to confiscation.

The cases here had in mind are chiefly those arising between client and architect. It may happen that the client believes his claim for damages or rebate to be entirely equitable, yet there is sometimes reason to infer that this belief is considerably strengthened by a feeling of possession, and of superior financial strength. On the other hand, it may happen that the client has no such belief, and that his demands are arbitrary to the verge of sharp practice.

The cases may therefore be grouped into two classes as regards the client, namely, those in which there is a manifest belief in the justice of the claim, and those in which the claim hinges on a perverse and far-fetched insistence upon minute and abstract fulfillment of the duties of architectural service. Within this latter class the possibility of risk and evil result to the architect are appalling. Within the former class they are quite serious enough to merit our earnest attention.

It is presumably evident to casual observation that the annual losses to the profession, due to these varied causes, must be very considerable; and, in the absence of statistics, it would seem an entirely reasonable assumption that the aggregate of these losses should far exceed the sum necessary for a fund devoted to common protection, even though a percentage of the typical cases thus brought to the attention of the courts were to fail of success in the issue.

At present such desultory litigation as is carried on is devoted to the gain of a particular and immediate end; and for this reason cases are rarely carried to the highest court of appeal.

On the other hand, we, as a particular professional class only recently come into active and responsible association with affairs, broadly regarding the interest of one as the interest of all, and holding the converse to be equally true; we, looking to the future and desiring that our status as it advances and differentiates should come into harmony with all other associated interests at the least possible cost to ourselves, do or should take a more abiding interest rather in those cases which are comprehensive and typical in their nature, and which, once passed upon by the higher courts, would permanently establish a guiding principle.

It is true, there is much to concern us in the fact, that in connection with our growth in power and usefulness, we have gradually drifted into a tacit assumption of responsibilities so vague that the developments of a day may prove such assumption to have been reckless.

It is doubtful, however, under present conditions, if a contract between client and architect can be so worded as to satisfactorily cover the risks above mentioned.

It is these considerations, thus generally stated, that have suggested the organization of a protective league, which shall diminish litigation by handling only typical cases, and insure stability and protection by securing in such cases the decision of the highest court of appeal. Compromise would therefore seem foreign to the policy of such an organization, which, it would seem, through the moral effect of its mere existence, power and singleness of purpose, would largely restrain those who now suggest a law-

* Circular issued by the Illinois State Association of Architects.

suit as alternative to compliance with their own arbitrary views of a settlement out of court.

It would, moreover, not only compel parties on either side of a dispute, to more searchingly examine the grounds of the opposition, but would assure to each member of the league the backing of a power superior to his own.

It is suggested that such a league be formed in each state, and that it should enroll all of the members of the profession who are in good standing; that its affairs be conducted, absolutely, by a small executive committee made up of men known to be sagacious and conservative; that only counsel of high legal attainment be retained; and that the party seeking the aid of such executive committee transfer his interests to them by full power of attorney, and that they conduct all cases in the name and interest of the league.

It is obvious that the mere taking up of petty quarrels should form no part of the work of the executive committee; and that they should espouse the cause of a member only after examination has convinced them that it is a vital one, a decision which would be of undoubted value to the profession as a whole. To prevent abuse, wise by-laws will suggest themselves; and all questions of league meetings, elections, assessments, records, etc., may well be left to the discretion of each organization.

All who feel an interest in this matter will please communicate with the executive committee of the Illinois State Association of Architects. It is their desire at once to form a protective league for the State of Illinois, and to assist to the extent of their ability in the formation of leagues in all other states.

Address all communications to R. C. BERLIN, *Secretary*,
61 Ashland Block, Chicago, Illinois.

The Metric System.

LAST November, the Boston Society of Civil Engineers appointed a committee, at the request of the Western Association of Architects (through its Committee on the Metric System), to canvass the members of that society for the purpose of eliciting their views in regard to the advisability of urging upon congress to provide for the adoption of the metric system by all the government departments.

The committee, in furtherance of the action of the society calling it into being, propounded by circular, the following interrogations:

(A) Whether it would be worth while ultimately to abandon many customary units, to secure uniformity and system in place of the existing irregularity?

(B) Whether the uniform system of the United States ought ultimately to be as exclusively decimal in its ratio between units of the same class, as United States money is now?

(C) If the United States and foreign nations would adopt the same system, whether the advantage to the United States over that of any equally good system, peculiar to itself, would be great enough to justify the United States in incurring a considerable increase of trouble and expense?

(D) Is the exclusive adoption of the metric system throughout the United States desirable?

(E) As to the Boston Society of Civil Engineers, as a body, joining with the Western Association of Architects in a petition to congress, as proposed by them, for the adoption of the metric system of weights and measures by the departments of the United States Government?

(F) Further opinions on weights and measures?

By the report of the committee, made to the society at its March meeting, it appears but 83 replies were received from a membership of 196, with the following analytic result:

To the first interrogation 79 replied affirmatively, and 2 in the negative; to the second, 73 replied affirmatively and 8 negatively; to the third, 68 replied affirmatively, nine negatively, and 2 as doubtful; to the fourth, 57 replied affirmatively, 19 negatively, and 4 as doubtful; to the fifth, 49 replied affirmatively, 30 negatively, and 2 as doubtful.

A large number of replies were received to the last interrogatory, from which typical extracts, from fourteen of them, are given in the published report of the society, and from which is gleaned that four of the contributors are wholly opposed to the suggested change; four look upon it as of questionable expediency, while the remaining six are outspoken in their preference. It is also gleaned from these typical extracts, that those who write against, as well as those who question the advisability of adopting the metric system, that neither appear to speak from an experimental standpoint, while those who write in its behalf, either have or do use it in their practical business.

In summing up the percentages of the affirmative and negative replies, and applying them to the required two-third vote of the constitution of the society, the committee assumes, taking the replies received as a basis of what the possible, if not probable, vote of the entire membership might be, that A, B, C and D would receive the indorsement of the society, while E would likely fail; therefore the committee "concludes that it is not the wish of this society to unite as a body with the Western Association of Architects in a petition to congress, as proposed by them, for the adoption of the metric system of weights and measures by the departments of the United States Government."

THE competition for the new municipal building of New York City has resulted satisfactorily for Mr. Charles B. Atwood—*Fortuna audaces juvat*. Substantially, he gets more than the full amount of the first prize, because, practically, he becomes the architect of the building, which is worth to him in fees anywhere from \$10,000 to \$20,000 a year for an indefinite period, and he is amenable to an expert committee of architects, instead of a board of municipal officers into whose decisions local politics enter largely. He gets forthwith \$2,000 for a set of very sketchy and defective plans, and is commissioned to make a new set of plans. This statement, possibly, may convince the *American Architect* that there is no doubt as to this competition having been conducted in a fair and liberal spirit.—*Art Age*.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1889, at Philadelphia. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month. Annual meeting first Thursday in October, 1888. Next meeting last Saturday in September. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1889, at Dayton. F. J. Otter, Dayton, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larimore, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. G. M. D. Knox, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October in each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. G. W. Williamson, secretary. Annual meeting, November 5, 1888.

CHICAGO ARCHITECTURAL SKETCH CLUB.

About thirty members of the Chicago Architectural Sketch Club took a Northwestern train Saturday, August 25th, for Fox Lake, Wisconsin, upon the invitation of Mr. Oliver Sollitt, to spend Sunday at his cottage at "Sunset." The trip was made in a special parlor car to McHenry, from whence they were conveyed by vehicles to the steamer which took the party up the Fox river fourteen miles to their destination. The party was well supplied with materials for sketching and photographing. The river journey was a very enjoyable one. After running through numerous lakelets, the boat having had a little mishap in the breakdown of a pump, Mr. Sollitt's place was sighted by the lights of many Chinese lanterns that shimmered across the lake. The greeting of a "jolly lot of ladies" and a splendid supper awaited the arrival of the excursionists. After supper, and after sleeping assignments were made, by which some were to be snugly housed in the cottage, others in a tasty little boat-house on the edge of the lake, and the remainder in tents near by, Friedberg's band, which accompanied the "outers" from the city, were conducted to a platform erected on the green for the occasion, and furnished the music for guests and other invited friends to the number of two hundred to dance by until the "wee sma' hours" came on, then the cottagers turned in to rest, and the boat-house contingent turned in, to turn out as soon as the "tenters were sandwiched" for the night, and razed the textile walls upon their unsuspecting heads, the result of which may be inferred if not described.

Next day roll was called at 4 A.M., and the visitors deployed as sketchers up to breakfast-time. After breakfast some boat-riding was done up to dinner-time, and then an adjournment to the steamer, in company with lady companions, was had and the day spent at the "lotus beds" and Wilmot until 10 P.M., including the run home.

To catch the 5:30 A.M. train at McHenry the next day necessitated an early retiring. Four A.M. found the delegation "leaving with regret, sitting

on two straws for a seat in a hay wagon, for a ride over one of those delightful country roads."

Mr. Sollitt's cottage, which is made nearly if not entirely of doors, is very artistic and from his own planning.

The invitation to the Chicago Architectural Sketch Club to exhibit at the Kansas City Exhibition had to be declined at the last moment, as the time was too short to collect strictly architectural drawings, so much of the club-work has been sketching from nature.

The Milwaukee Exposition has on exhibit a contribution of drawings from the Chicago Architectural Sketch Club to the number of about one hundred, mostly drawings and sketches from nature.

CIVIL ENGINEERS' CLUB OF CLEVELAND, OHIO.

This society holds regular meetings on the second Tuesday of each month—John Whitelaw, president; James Ritche, secretary; C. O. Arey, corresponding secretary. The committees are: on finance, membership, library, national public works, civil engineering and surveying, mechanical engineering, architecture, railroad engineering, applied science. The unexpired programme of the year comprises the following for papers and discussion: September 11, architecture; October 9, report on civil engineering; November 13, report on mechanical engineering; December 11, report on railroad engineering; January 8 (1889), report on architecture; February 12, report on applied science; March 12, annual election; April 9, applied science.

A cordial invitation is extended to all persons interested to attend the meetings.

RESOLUTIONS ON DEATH OF ARCHITECT RAMSDEN.

The telegraph and the press have recorded the assassination, in his office in the Gibraltar building, at Kansas City, Missouri, on the 17th ultimo, of A. H. Ramsden, a reputable architect of that city, by J. H. Martling, a draftsman who had been in his employ, and whom he had recently discharged. They had a controversy over it, when Martling threw a brick at Mr. Ramsden, which struck him in the head and from the effects of which he died the next day. The deceased was a member of the Kansas City Association of Architects; also a member of the Kansas City Sketch Club, of which he was at one time vice-president. Both organizations passed resolutions of respect and voted to attend the funeral, which was held on the 22d, the remains being removed by cars to Norwich, New York, for interment. Martling and a draftsman named Leon R. Wickes, who was working in the office, have been held for the murder—the first as principal, the latter as "accessory after the fact."

Our Illustrations.

Chicago sketches; C. B. Schaefer, del.

Residence on Prospect ave., Milwaukee; O. Enders, del.

Residence at Park Manor, Ill.; Handy & Cady, architects, Chicago.

Western German Bank Building, Cincinnati, Ohio; A. O. Elzner, architect.

First National Bank and Office Building, Bloomington, Ill.; M. E. Bell, architect.

Chamberlin's Hotel, entrance front, Old Point Comfort, Va.; Smithmeyer & Pelz, architects, Washington, D. C.

New Manufacturing Building for Davis & Rankin, corner Lake and Peoria streets, Chicago; Clarence L. Stiles, architect.

Chicago Architectural Sketch Club competition for an eight-room frame house; T. O. Fraenkel, first place; W. B. Mundie, second place. Also hall competition; W. G. Williamson, first place.

CORRECTION.—The correct title for plate of Second Baptist Church, published in August number, is: Second Baptist Church, St. Louis, Mo.; Charles C. Nicholls, architect, Albany, N. Y.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence at Philadelphia, Penn.; T. P. Chandler, architect.

Residence of H. B. Stone, Chicago; J. L. Silsbee, architect.

Residence for Gerald M. Stanton, Chicago; Cobb & Frost, architects.

Residence of A. S. Winslow, Cincinnati, Ohio; Jas. W. McLaughlin, architect.

Residence, corner Seventeenth and N streets, Washington, D. C.; W. M. Poindexter & Co., architects.

As a matter of interest to the architectural profession, there are published in this number, the general plan and some interior views of the offices of Messrs. Burnham & Root. Some time ago a leading manufacturer of Chicago was asked to write an open letter to the architects at large regarding their methods of practice and the reformation which appeared necessary. His paper was read before the Illinois Association, and in it the writer said in a general way that the time was not far distant when every successful architect must either be a specialist or the center of an organization of specialists. Subsequent facts have proved the correctness of his view. Among the architects who heard that paper read several have since become practical specialists, but Messrs. Burnham & Root have taken the other course and surrounded themselves with men trained in the various departments of architectural practice so that they now have associated with them not one, but several well-known experts in construction, in plumbing, sewerage, sanitation, etc., besides competent, trained artistic designers, such as may be found in other offices. They have endeavored to insure that each part of the work be done with precision and dispatch, making a working organization perhaps not hitherto attempted in architectural offices. The system thus established has made necessary a larger amount of space than is usual and a somewhat radically different arrangement of plan. The rapid growth of the country is such that many other firms will probably find it necessary to follow in a somewhat similar direction.

Mosaics.

THE pleasing effect that may be given to suburban residence buildings and country villas by the use of vari-hued shingles, on roof and gable, under artistic direction, is too well understood by architects to require more than a reference to the fact. One of the barriers to their more general use has been, heretofore, in the ephemeral nature of the stains or dyes that were used; but it seems this fading-out of the colors and tints and the liability to turn black in a little while has been most successfully overcome by what is known as "Dexter English Shingle Stain," which does not wash out or lose any of its brightness under the severest climatic tests. These stains are indorsed by many prominent architects, and the manufacturers' claim is that they are wholly of an oily nature, containing no dead oil, and colored by the use of pure English ground pigments.

THE Missouri Pacific Railroad will inaugurate a series of harvest excursions to all points in Kansas, Nebraska, Arkansas and Texas, at one fare for the round trip. Tickets good for thirty days, and the most liberal stop-over privileges. These excursions will start from St. Louis August 21, September 11 and 25, October 9 and 23, and at later dates, to be announced subsequently. There is no important point in the great West and Southwest that is not reached by the Missouri Pacific. Its cars and service are unsurpassed in this country for elegance, comfort and safety, its time schedules are adapted to the convenience of travelers, and it offers its patrons the maximum of speed and regularity without accident. For variety and beauty of western scenery, mountain, river, prairie and valley the Missouri Pacific and Iron Mountain routes are unequaled. With the ample stop-over privileges offered, these half-rate harvest excursions will prove immensely popular. Tickets sold at the Union Depot, also at 102 N. Fourth street, St. Louis.

THE lighting of large buildings constitutes one of the principal expenses that the landlord or tenant has to meet. It is remarkable to notice the great saving in this respect effected by means of a modern incandescent electric-light plant. The cost of lighting is so much reduced with a properly installed and arranged incandescent electric-light plant, that it is extremely rare nowadays to find a new building not equipped for this purpose. One of the most noted instances recently is the very handsome plant installed in the Rookery by Leonard & Izard for the Edison Company. The exhaust steam from the electric-light plant is used for heating the building, and since the exhaust steam is practically as good for heating purposes as steam at high pressure, the expense of fuel for the electric-light plant is almost entirely eliminated. The cost of lighting a building of this character is less than half the expense of lighting by gas, and is far preferable in every way. Leonard & Izard are also installing a great many such plants in other large buildings. One of their recent contracts is the Auditorium building. It will be lighted exclusively by Edison light, no gas pipes being placed in the building.

WEDNESDAY evening, September 5, the sixteenth annual exhibition of the Inter-state Exposition was inaugurated at the Exposition building, under flattering auspices. Undoubtedly this is the fullest and most complete display of the products of industry, science and art that has been seen in Chicago for many years. While the general public will find much in the immense collection to interest, gratify, and instruct them, specialists in the several departments represented cannot fail to reap advantage by a study of what is to be seen, and these may include the architects and builders, as the display of building material and articles entering into building construction is by no means meager nor unimportant. The display has been classified as follows: Department A, vehicles and agricultural implements; B, general machinery and tools; C, wrought and cast products of useful minerals; D, textile and materials; E, household and personal goods; F, products of farm, orchard, nursery, and green houses; G, food, drink and tobacco; H, natural science and education; I, fine arts, industrial and decorative designs; K, liberal arts. State Fish Commissioner Bartlett has also contributed a fine piscatorial display from the Illinois hatchery, added to which are valuable contributions from Quincy, Fox Lake, and other points in Wisconsin. The art gallery is exceedingly interesting this year. The walls of the four largest galleries are hung with oil paintings, while a fifth, the smallest gallery, is devoted to watercolors and pastels. Over five hundred examples are from the easels of distinguished English, American, French, German, Dutch, Italian, Spanish, Belgian, and Finnish artists; among them will be found such names as Cazin, Vollon, Albert, Wolff, Tyron, Eakins, Iness, La Farge, Edelfelt, Thompson, and scores of others equally famous. It would be a pleasure to name some of the masterpieces, but the simple naming them would add nothing to this reference—they must be seen to be appreciated. It is a pleasurable contemplation to realize this valuable exposition of what is best in human endeavor in the various walks of industry is to be open to the public until October 20, and at a mere nominal price of admission.

Synopsis of Building News.

Ashland, Wis.—Architects Conover & Porter: For Board of Education, two-story brick and stone school building, 86 by 62 feet; cost \$10,000.

Aurora, Ill.—Architect J. E. Minott reports: Brick business and office building, 180 by 100 feet; cost \$50,000. Brick and stone parsonage for St. Nicholas Church; cost \$10,000.

Aurora, Neb.—Architect C. C. Rittenhouse, of Hastings, has prepared plans for a two-story brick Masonic building, 66 by 40 feet; cost \$25,000.

Battle Creek, Mich.—Architect A. B. Ordway: For the School Board, two-story brick school building, 56 by 58 feet; cost \$10,000.

Bay City, Mich.—Architect D. P. Clark reports: Indications are for a very quiet fall season. For H. W. Sage, two-story salt storage building, 80 by 122 feet; cost \$6,500; also boiler-house; cost \$1,000. Several small jobs, aggregating about \$6,200, under way, and preparing sketches for some projected work.

Chicago, Ill.—There is little change since last month. All of the architects have more or less work in hand, most of which is a medium class.

Architects Patton & Fisher have been selected as architects of the Hackley Library, to be built at Muskegon, Mich. The exterior of the building is to be faced with granite. The interior will be fireproof throughout and contain accommodations for 75,000 volumes. The foundation will be put in this fall and the building completed next year.

Estimated cost \$65,000. Same architects have prepared plans for the alteration of the building on Walton place for Doctor G. H. Bentley; cost \$2,700. The refitting of the basement, southeast corner State and Washington streets, \$4,000. Residences at Oak Park, Ill., for John Rankin; cost \$6,000; Edward Osgood, \$3,500; D. D. Garcelon, \$3,500; John L. Pearson, \$2,200. Salt Lake City, Utah, school-house, \$5,000. Residence for Rev. David P. Hatch, Rockland, Me.; cost \$3,000.

Architects Pond & Pond: For Wm. C. Stevens, seven-story brick store and office building, 40 by 80 feet; cost, \$50,000.

Architect A. L. Schellinger: For the Misses Brown, two-story and basement stone front residence, 40 by 65 feet; cost \$12,000. Furnace, hardwood finish.

Architect Julius H. Huber: For C. Steinbrecher, seven brick cottages, 21 by 42 feet; cost \$12,000. For Kirchstein & Deppe, two-story and basement brick stone and terra-cotta residence, 20 by 64 feet; cost \$12,000.

Architect C. M. Palmer: For Arthur Dixon, two three-story and basement brown-stone front residences, 25 by 94 feet; cost \$25,000. Second Methodist Church, Wisconsin, variegated stone building; cost \$20,000.

Architects Cobb & Frost: For J. E. Judson, three-story and basement residence, 25 by 65 feet; also barn, 25 by 52 feet; cost \$20,000.

Architect T. N. Bell: For J. J. Fenn, ten one-story frame cottages, 21 by 40 feet; cost \$10,000.

Architect J. T. Long: For J. L. McClure, two-story and basement stone front dwelling, 22 by 58 feet; cost \$7,000. Covenant Baptist Church and Sunday School room, Englewood; cost \$15,000.

Architect S. V. Shipman: For C. L. Raymond, improvements on residence; cost \$9,000. For Hamblin Estate, improvements on store building, 94 Franklin street; cost \$7,000. For J. Fitzpatrick, three-story and basement dwelling, 25 by 75 feet; cost \$7,000.

Architects Thiel & Lang: For G. Dragorius, three-story and basement dwelling, 22 by 60 feet; cost \$7,000.

Architect L. G. Halberg: For A. H. Gates, four-story and basement stone front apartment building, 25 by 71 feet; cost \$12,000.

Architect Thomas Scott: Six-story and basement brick and stone warehouse, 42 by 150 feet, on Market near Van Buren street; cost \$30,000.

Architect S. S. Beman: For J. F. Wallach, two-story residence, 35 by 57 feet; cost \$12,000.

Architect A. F. Wolf: For Wm. Alexander, three-story dwelling, 20 by 72 feet; cost \$6,000. For Wm. and Henry Spitz, four-story store and flat building, 50 by 87 feet; cost \$20,000.

Architect L. B. Dixon: For L. Glick, two-story and basement stone-front residence, 25 by 72 feet; cost \$10,000.

Architect Jean A. Wierzeinec: For Biedeman Bros., two-story and basement brick and stone store and flat building, 25 by 85 feet; cost \$6,000. For W. H. Henry, four-story brick and stone store and flat building, 25 by 80 feet; cost \$20,000.

Architect F. B. Townsend: For C. J. Dale, two-story and basement residence, 26 by 45 feet; cost \$5,000. For P. Norcross, Janesville, Wis., residence, 40 by 50 feet; cost \$5,000.

Architect Wm. T. Leshar: For F. Tonges, three-story and basement brick and stone store and flat building, 25 by 77 feet; cost \$8,000.

Architect Alfred Smith: For Mrs. R. Chaperon, two-story and basement brick and stone residence; cost \$8,000. For J. Thompson, flat building, 22 by 58 feet; cost \$8,000.

Architect C. C. Miller: For Dr. A. W. Burnside, remodeling residence; cost \$8,000.

Architect C. J. Freijs is preparing plans for a brick and stone school building, 70 by 80 feet, to be erected at Cheltenham Beach; cost \$20,000.

Architect W. L. Carroll: For Alice M. Kirby, four-story cutstone front flat building, 36 by 100 feet; cost \$20,000. For Maxwell Bros., two two-story stone front residences, 25 by 70 feet each; cost \$20,000.

Architects Scheller & Fry: For Chas. S. Fry, three-story and basement flat building, 48 by 62 feet; cost \$8,500. For Brown County, Wis., Fair Park Association, at Green Bay, Wis., park houses, etc., to cost \$11,000.

Architect John Duncan: For J. C. Gould, factory building, 32 by 70 feet; cost \$15,000.

Architects Wilson, Marble & Lamson. For the Morton estate, six-story brick and stone apartment building, 65 by 70 feet; cost \$75,000.

Architect M. L. Beers: For W. H. Gleason, three-story and basement stone and brick front residence, 25 by 70 feet; cost \$10,000. For M. L. Beers, two-story and attic frame residence, 56 by 33 feet; cost \$9,000. For J. B. Lord, two-story and attic frame residence, 34 by 52 feet; cost \$7,000.

Architects John Woollicott & Son: For C. A. David, three two-story and basement stone front residences, 50 by 65 feet; cost \$10,000. For Dr. Michael, two-story store and flat building, 25 by 75 feet; cost \$9,000. For Robert Robertson, four-story store and flat building, 38 by 75 feet; cost \$12,000.

Architect T. V. Wadskier: For George L. Otis, two three-story and basement store and buildings, 24 by 96 and 24 by 60 feet; cost \$20,000. For O. Remmer, three-story and cellar brick, stone, and terra-cotta store and flat building, 60 by 68 feet; cost \$20,000. For A. A. Turner, three-story brick and stone stores and flats, 141 by 143 feet; cost \$50,000.

Architects Adler & Sullivan: For L. Silverman, addition, 30 by 75 feet, to building on Third avenue near Van Buren street; cost \$38,000.

Architect Wm. Thomas: For J. D. Marshall, two two-story stone front residences, 50 by 68 feet. Also two-story barn, 27 by 47 feet; cost about \$50,000.

Architects Holabird & Roche are erecting in Graceland Cemetery a mortuary chapel and crypt, to cost about \$50,000.

Architect W. A. Arnold: For Mr. Whitney, two-story and basement frame residence, 32 by 50 feet; cost \$4,000. For C. W. Bennett, D.D., two-story and basement brick and frame dwelling, 30 by 54 feet; cost \$4,200. For M. E. Society at Desplaines, frame church, 32 by 50 feet; cost \$3,000.

Architect John H. Wagner: For W. D. Ewart, one-story brick factory building, 260 by 184 feet; cost \$50,000.

Architect N. D. Little: Two-story and attic and basement stone and frame residence, 54 by 32 feet, at Park Manor; cost \$8,000. For W. D. Gleason, frame dwelling, 27 by 37 feet; cost \$3,500.

Architects Froman & Jebson: For L. Danner, three-story brick store and flats, 25 by 66 feet; cost \$8,000.

Architect C. H. McAfee: For Harry Brown, three-story and basement apartment building, 36 by 75 feet; cost \$9,000. For C. W. Ellsworth, two-story stone front dwelling, 25 by 54 feet; cost \$8,000.

Architect J. H. Carpenter: For P. Wineman, two-story and basement frame dwelling, 25 by 56 feet, in Austin; cost \$3,500.

Architect Frank L. Lively: For Dr. I. R. McKenzie, two-story and basement brick and frame residence, 28 by 48 feet; cost \$4,500.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall:

Business has in no way livened up since last issue. While Cincinnati is one of the most solid cities financially in the country, yet the two large bank failures of the past year (Fidelity and Metropolitan), coupled with the fear of strikes, have had their effect. There is no doubt the presidential year, and the uncertainty of what is to be done with the tariff, have also had a checking influence. Speculative building, in the full meaning of the word, has been small, and the houses generally of a class indicating comfort, with a fair rental. The corner stone of Hannaford's *chef-d'œuvre*, the city hall, was laid with appropriate ceremonies in true Masonic style this month (August), and in a few years our city can feel proud over a magnificent municipal building. In order to do justice to the "foreign element," who had meritorious work in the architectural drawings display of our Centennial, and whose names were unintentionally omitted, it gives me pleasure to mention them now. Architect A. Druiding, of Chicago, had several designs, but his best was St. Michael's Church, at Rochester, N. Y., designed in that beautiful style known as English Gothic. Messrs. Williams & Otter, of Dayton, Ohio, had two photographs of buildings of their own creation, namely, Y. M. C. A. building and a private residence in Dayton, the residence being especially pleasing.

In the Art Gallery, there are three beautiful pieces on canvas, that could be properly classed as architectural subjects although the foreground is full of figure.

In "The entry of the Great Mogul," by E. S. Weeks, the gorgeousness of the florid Indian architecture is well wrought in oil.

"The Arm Seller of Tunis," by A. Golz, admirably depicts Moorish architecture: while "The Custom House at Venice," by Felix Ziem, transports one to Venice, and allows the study of her style of buildings.

I also neglected to mention that the Machinery Hall, so admirable in its place, was designed by Architect Jas. W. McLaughlin.

Architect E. H. Ketchum, in charge of Wm. Martin Aiken's office, who is now absent on a tour through Spain and Italy, reports the following: A brick Presbyterian

church at Newcastle, Ind., 50 by 80 feet. One of the features of this building is its being heated by natural gas; cost, \$8,500. Mr. Aiken has left his office in capable hands.

Architect Thornton Fitzhugh has prepared for a frame residence of eight rooms, bath, etc.; pine finish and slate roof; cost \$5,000. Also a store building, two stories high, tin roof; size 30 by 40 feet; cost \$2,000.

Both Mr. Fitzhugh and Mr. Godley, who has an office adjoining, have their time moderately employed.

Architect Emil G. Rueckert has his hands full with the plans mentioned below: For Jno. Schneider, a four-story pressed brick front store building, with tin roof; size 20 by 50 feet; cost \$6,000. For Julius Balke, Esq., one double one-story brick house of six rooms, and one double two-story brick house of twelve rooms, with tin roof; cost \$3,500. For Chas. F. Hornberger, one double two-story frame house of ten rooms, with tin roof; cost \$3,500. For Mrs. Henke, a two and a half story brick dwelling of six rooms, laundry and attic, with slate roof; cost \$3,500. For Mrs. L. Schwind a three-story, pressed brick front, store building, 20 by 110 feet, with tin roof; cost \$6,500. For Wm. Heheman, a two and a half story brick dwelling of seven rooms, with tin roof; cost \$4,000. For Jos. Klein, a double brick house of eighteen rooms, with slate roof; cost \$11,000.

Architect Emil F. Baude has prepared plans for a three and one half story dwelling house for Mrs. Dooley, 196 Cutter street; to be built of brick with stone trimmings, softwood finish, blinds, mantels, galvanized iron cornice and tin roof; cost about \$6,500. Also plans for a three-story dwelling house for H. Teepe, 246 State avenue, to be of brick with stone trimmings, softwood finish, blinds, mantels and tin roof; it will cost about \$3,500. Also plans for a two and one half story dwelling house, for John Morewood, 539 Colerain avenue, to be of brick, with stone trimmings, pine finish, blinds and tin roof; it will cost about \$3,500.

Architect Adam J. Bast reports the following: A two and one half story dwelling house, to be erected at Riverside, Ohio, for H. Veigel of that place, to be of frame with slate mansard, blinds, wood mantels, galvanized iron cornice and tin roof; cost about \$4,500. A two and one half story dwelling house, to be erected at Fairmount, Ohio, for Miss T. Rupell, of that place, to be of frame, softwood finish, have wood mantels, blinds, galvanized iron cornice and tin roof; cost about \$3,000.

Architect G. & A. Brink report as follows: Plans for a three and one half story dwelling house, to be erected for John G. Moorman, to be of brick, with stone trimmings, pine finish, inside and outside shutters, galvanized iron cornice and tin roof; cost about \$6,500. Plans also for a two and one half story residence to be erected for T. Menthup, to be of brick with stone trimmings, pine finish, wood mantels, inside and outside blinds, galvanized iron cornice and tin roof; it will cost about \$3,000. Plans also for a two and one half story dwelling house, to be erected for C. Kirchner, to be of brick with stone trimmings, Eastlake finish, wood and iron mantels, bathrooms and water-closets, inside and outside blinds, galvanized iron cornice and tin roof; it will cost about \$3,500.

Architect John H. Boll has plans for a two and one half story dwelling house for P. Nelson, to be of pressed and common brick with stone trimmings, hardwood finish, inside blinds, slate mantels, laundry, wood cornice, slate roof and all improvements and conveniences; it will cost about \$5,000.

Architect J. B. Steinkamp has been intrusted with the alterations in, and additions to the old Emery residence on West Fourth street. Thos. Emery's sons are the owners, and they will convert it into a very complete flat building; cost about \$5,000.

Colorado Springs, Col.—Architect L. A. Pease has plans for a Congregational church building, to cost about \$30,000.

Davenport, Iowa.—Architects T. B. McClelland & Co. have plans for a convent building, to be built for the Catholic Society, at a cost of \$20,000.

Architects John Woollicott & Son, of Chicago, Ill.: For Baptist Society, brick and stone church building, 72 by 121 feet; cost \$35,000.

Denver, Col.—Architect O. Bullock has prepared plans for a two-story and basement brick and stone store building, 50 by 90 feet, and a dwelling to be erected at Ouray, Col. Also has plans for three cottages, to be built in Denver, to cost about \$4,500.

Architects Balcomb & Rice: For S. A. Walker, two and one-half-story brick and stone residence; cost \$9,000. Also letting contracts for block of five brick dwellings, for Albert Lewin.

Architect F. Goodnow has plans for a two-story brick and stone double house, to cost \$8,000.

Architect Lang is preparing plans for a two-story stone residence to be erected for W. D. Suydam; cost \$6,000.

Messrs. Healy & Millet are putting the finishing touches on the Trinity M. E. Church, R. S. Roeschlaub, architect. The building will cost \$150,000 when completed. All of the architects are busy. A great deal of small work is being done.

Among the building permits recently issued are the following, contemplating an expenditure of \$5,000 or more: W. G. Russell, one-story brick building, 50 by 117 feet; cost \$14,300. Sisters of the Good Shepherd, addition, 54 by 78 feet, to home; cost \$9,700. Mrs. D. C. Dodge, one and one-half-story brick dwelling, 30 by 50 feet; cost \$5,000. Denver Electric Illuminating Co., one and one-half-story brick building, 44 by 64 feet; cost \$5,000. School Board, three-story and basement brick school building, 88 by 90 feet; cost \$39,000. Clark Lipe, two-story and basement stone and brick terrace, 62 by 125 feet; cost about \$40,000. C. J. Reilly, two-story brick building, 25 by 100 feet; cost \$7,500. A. A. Ordway, two-story brick dwelling, 25 by 54 feet; cost \$10,000. P. H. Zang & Co., two-story brick stable, 92 by 122 feet; cost \$20,000. J. J. Reithman, three-story and basement brick and stone building, 125 by 150 feet; cost \$60,000. F. Latchum, two-story brick dwelling, 48 by 48 feet; cost \$10,500. Chas. Dreyfus, one-story brick terrace, 50 by 125 feet; cost \$6,500. D. C. Benedict, two one and one-half-story, 22 by 44 feet; cost \$5,000. L. A. Melburn, two-story stone and brick dwelling, 42 by 49 feet; cost \$15,000. D. C. Packard, two and one-half-story brick dwelling, 37 by 52 feet; cost \$12,000. W. S. Kinsey, two-story brick and stone dwelling, 45 by 63 feet; cost \$18,000. A. Kemple, two and one-half-story brick dwelling, 25 by 46 feet; cost \$6,000.

Detroit, Mich.—Architect A. J. Talbot: For Cornelius Shea, two-story frame dwelling, 26 by 61 feet; cost \$3,000; Thomas Moore, builder.

Architects Spier & Rohus: For Congregational Society, brick and stone church, 57 by 72 feet; cost \$6,000; Henry Carew, builder.

Architects M. L. Smith & Son have prepared plans for a three-story brick and stone double dwelling, 42 by 78 feet; cost \$12,000; Henry Carew, builder.

Architects Donaldson & Meier: For Detroit Fire Commission, two-story brick and stone engine house and barn, 50 by 88 feet, slate roof; cost \$14,946; Henry Carew, builder. For Mrs. Medbury, three-story brick and stone double dwelling, 66 by 72 feet; cost \$27,000; A. Albrecht, builder. For Detroit Dry Dock Co., two-story brick stable, 34 by 60 feet; cost \$3,600; W. H. Traves, builder. For J. P. Hucklestein, two-story brick and stone dwelling, 28 by 42 feet, slate roof; cost \$4,500; W. H. Traves, builder.

Architects Mason & Rice: For C. A. Ducharme, three-story brick and stone dwelling, 45 by 82 feet, slate roof; cost \$19,000; A. Chaption, Jr., builder. For Berry Bros., three one-story brick factory buildings, 12 by 120 feet each; cost \$5,500. For M. A. Brennan, two-story brick and stone dwelling, 35 by 50 feet, slate roof; cost \$6,000; John Finn, builder.

Jno. P. Schmitt is building for Franz Kroff, a two-story brick store building, 25 by 50 feet; cost \$4,000.

Strange & Dumas are erecting for D. Beaudry, a two-story frame dwelling, 26 by 72 feet, also a barn; cost \$5,000.

Henry P. Fisher & Bro. are erecting for themselves, two two-story brick and stone dwellings, 28 by 55 feet; cost \$4,000.

During the month of July there were issued 193 permits for new buildings, to cost \$277,791; and 53 permits for alterations, etc., to cost \$34,810. Total, \$312,601.

There are numerous small dwellings being erected, which cost from \$2,000 to \$4,000 each.

Duluth, Minn.—Architects Palmer & Hall have plans for a three-story brick hotel building, 90 by 95 feet, to be erected at Old Superior; cost about \$30,000.

Evansville, Ind.—Grace Presbyterian congregation are about to erect a brick and stone building, 40 by 80 feet, for Sunday school and lecture room; cost \$10,000. Mackey, Nisbet & Co. are erecting a brick and stone wholesale building, 75 by 140 feet; cost \$60,000.

Grand Rapids, Mich.—Architect W. G. Robinson: For Sligh Furniture Co., three-story brick factory building; cost \$10,000. For J. H. Metheaney, frame dwelling; cost \$7,000.

Jackson, Mich.—Architect L. D. Grosvenor: For School Board, three-story brick and stone school building, 45 by 100 feet; cost \$10,000.

Kansas City, Mo.—The building trades have no reason to complain of the summer season. A larger amount of building has been done in the past month or six

weeks than during the same period last year. The new projects are very largely residences and low cost houses. Considerable suburban work is in progress. There is a good demand for cheap houses, and considerable capital is being invested in this direction.

Among the building permits recently issued are the following, contemplating an expenditure of \$5,000, or more: S. E. Sexton, two-story brick business block, 50 by 50 feet; cost \$9,000. J. A. L. Waddell, two-story frame residence, 30 by 60 feet; cost \$10,000. O. W. Shepard, two two-story brick buildings, 22 by 40 feet; cost \$5,000. Louis Schoerr, two-story brick double residence, 48 by 108 feet; cost \$10,000. F. A. Lamp, two-story brick residence, 22 by 60 feet; cost \$5,000. Kansas City Belt Railway Co., brick and stone round house, 200 by 60 feet; cost \$7,000. S. H. & H. F. Anderson, three-story brick and stone double residence, 44 by 60 feet; cost \$12,000. Herman Long, three-story brick business block, 46 by 54 feet; cost \$5,000. B. Miller, two-story brick residence, 35 by 61 feet; cost \$7,000. Jennie L. Reid, two-story brick residence, 30 by 44 feet; cost \$5,000. E. H. Bouton, three two-story brick residences, 30 by 32 feet; cost \$9,000. James Larie, two-story brick business block, 72 by 63 feet; cost \$12,000. E. H. Bouton, two two-story frame dwellings, 22 by 47 feet; cost \$5,000. L. F. Doane, five-story brick business building, 21 by 100 feet; cost \$35,000. G. W. McKean, two-story brick double residence, 41 by 45 feet; cost \$6,000. James D. Yager, five two-story frame dwellings, 19 by 42 feet; cost \$7,500. L. H. Hammond, block of two-story brick dwellings, 126 by 35 feet; cost \$25,000. James Cotter, five-story brick and stone business building, 25 by 112 feet; cost \$15,000. Stevens & Caffery, three brick residences; cost \$13,500. Smalley and Stevens, brick residence; cost \$4,500. D. Hamlin, block of three-story brick residences, 108 by 52 feet; cost \$25,000. Merchants National Bank, three one-story brick buildings; cost \$7,000. Gilbert Tolliver, two-story brick residence, 19 by 42 feet; cost \$5,000. Ferd. Heim Brewing Co., three-story brick stable, 155 by 87 feet; cost \$12,000. J. W. Merrill, three-story brick residence, 27 by 65 feet; cost \$6,000. Mrs. M. M. Alwell, block of three-story brick residences, 74 by 72 feet; cost \$25,500. V. E. Rhodes, five two-story frame dwellings, 22 by 28 feet; cost \$5,000. B. R. Bacon, block of one-story brick dwellings, 143 by 106 feet; cost \$25,000. D. O. Smart, two-story brick residence, 54 by 68 feet; cost \$40,000. James Hewson, five-story brick business building, 48 by 105 feet; cost \$35,000. Leslie C. Ferree, block of two-story brick residences, 60 by 54 feet; cost \$10,000; also block 48 by 54 feet, cost \$14,000; also one house, 22 by 64 feet, cost \$4,000. H. Mooney, two-story brick residence, 40 by 70 feet; cost \$15,000. S. W. Smith, three two-story brick double residences, 40 by 44 feet; cost \$15,000; also two-story brick dwelling, 22 by 43 feet, cost \$3,000. Rennick & Stone, five two-story frame dwellings, 20 by 40 feet; cost \$10,000. Wall Street Building Company, seven-story brick, stone and iron bank and office building, 70 by 98 feet; cost \$200,000; architects, Winslow & Wetherell, Boston, Mass.; contractor, C. E. Clark, Boston, Mass.; Frank E. Pierce, western agent for the contractor.

Lausling, Mich.—Architect E. E. Meyers, of Detroit: For Central M. E. Society, brick and stone church building; cost \$30,000.

Lorena, Kan.—Architect S. H. Stewart, of Wichita: For the School Board, brick school building, to cost \$9,000.

Madison, Wis.—Hon. G. B. Burrows is about to erect an opera house, the details of which have not yet been received.

Mr. Frank Ogden intends remodeling his business block into a first-class hotel.

McMinnville, Ore.—J. C. Cooper, county surveyor, reports: Present condition and outlook very good. Prospects never better here.

Architect G. W. Babcock, of Walla Walla: For Gambrell County, two-story and basement brick and stone court house, 94 by 97 feet; cost \$45,000; Pauly Jail Co., of St. Louis, Mo., builders. For School District No. 41, two-story frame schoolhouse, 60 by 48 feet, stone basement; cost \$10,000; H. Schenk, builder. Both of the above are under way.

Milwaukee, Wis.—Architects E. Townsend Mix & Co.: For A. K. Mayhew, two-story brick, stone and terra-cotta residence, 26 by 56 feet; cost \$10,000.

Architect Alfred C. Clas: For J. Cohen, two-story brick-veneered dwelling; cost \$16,000. For W. H. Osborne, brick dwelling; cost \$14,000. For Bach & Fitzgerald, brick factory building; cost \$32,000. For E. D. Moore Mfg. Co., machine shop and foundry; cost \$15,000.

Architect C. A. Gombert: For David N. Benjamin, three-story stone residence, 84 by 160 feet, to cost about \$100,000.

Architects H. P. Schnetzky & Co: For the National Knitting Works, two-story brick and stone factory building, 41 by 196 feet; cost \$15,000.

Architect Geo. B. Ferry: For Joseph Schlitz Brewing Co., four-story brick store and warehouse, 20 by 60 feet; cost \$9,000.

Minneapolis, Minn.—Among the permits recently issued are the following, for buildings to cost \$5,000, or more: Normanna Society, four-story brick and stone store and club house; cost \$45,000. A. A. Pond, four-story brick and stone store building; cost \$10,000. Park Avenue Congregational Society, brick and stone church; cost \$45,000.

Ogallala, Neb.—Architect C. C. Rittenhouse, of Hastings, has prepared plans for Keith County, for a two-story court house, 58 by 78 feet; cost \$18,500.

Peoria, Ill.—Architect W. W. Boyington, of Chicago: For Second Presbyterian Society, stone church building, 72 by 144 feet; cost \$50,000.

Sheboygan, Wis.—Architect Alfred C. Clas, of Milwaukee, has prepared plans for a two-story frame dwelling, to be erected here at a cost of \$7,500.

Sioux City, Iowa.—Architect James W. Martin: For E. Cortright, brick store building, 25 by 80 feet; cost \$9,000; J. A. Swanson, builder.

Spokane Falls, W. T.—Architects Allen & Kenway, of Boston, Mass.: For J. D. Sherwood, five-story brick store building, 60 by 100 feet; cost about \$40,000.

Springfield, Ill.—Architect Geo. H. Helmle: For S. W. Currier, remodeling two-story brick and stone dwelling, steam heat, wood mantels, hardwood finish, etc.; cost \$7,000; Rhodes & Bro., builders. For Dr. H. O. Bolles, remodeling two-story frame dwelling; cost \$2,000; Bush & McKee, builders. For Henry Stange, two-story frame cottage; cost \$2,500; Wm. Mayhew, builder. For Dr. J. A. Jones, two-story frame cottage; cost \$2,000; H. Elshoff, builder. For B. F. Talbott, two-story frame cottage, eight rooms, furnace heat, wood mantels, stained glass, etc.; cost \$3,000; Wm. White, builder. For Hon. H. A. Brand, two-story frame cottage, furnace heat, wood mantels, etc.; cost \$3,500; D. P. Hopping, builder. For Mrs. H. Pfau, two-story frame

cottage, eight rooms; cost \$3,000; Wm. White, builder. For Dr. I. S. Hughes, two-story frame cottage, nine rooms, steam heat, wood mantels, stained glass, etc.; cost \$5,500; Jas. L. Powell, builder. For Kunz Bros., two-story pressed brick and Cleveland stone, 20 by 140; cost \$5,000; N. Ritter, builder. For J. C. Meldon, two-story double frame dwelling; cost \$3,500; projected. For Baptist church, two frame mission churches, 28 by 46; cost \$1,500 each; — Johnson, builder. For R. C. Steel, two-story frame dwelling house, eight rooms, wood mantels, furnace heat, stained glass, etc.; cost \$3,500; projected. For Matt. Neff, two-story brick and stone store and dwelling, 24 by 60; cost \$4,500; projected.

St. Louis, Mo.—Among the building permits recently issued are the following which contemplate an expenditure of \$5,000 or more. M. Meyer, three-story brick store and dwelling, 25 by 68 feet; cost \$6,700; F. W. Loffhagen, builder. St. Louis Mutual House Building Association, two-story brick dwelling, 23 by 56 feet; cost \$5,000; W. C. Popp, builder. Ellermann Malt Company, alterations to brick building; cost \$5,000. Emily and Ida Rose, two-story brick dwelling, 49 by 48 feet; cost \$5,700; A. Uhri & Son, builders. J. Kelly, two-story brick store and dwelling, 48 by 70 feet; cost \$7,000; Shinusgn & Sloss, builders. Chamberlain Arcade Co., two-story brick arcade building, 108 by 118 feet; cost \$25,000; C. C. Hellmers, Jr., architect; Kohlmeier & Son, builders. J. Crobb, two-story brick dwelling, 43 by 40 feet; cost \$5,000; J. H. Keefe, builder. S. L. Jones, brick dwelling; cost \$7,000. Dr. J. H. McLean, brick warehouse; cost \$7,000. R. Norris, brick club house; cost \$7,000; H. E. Roach, builder. Dr. S. Pollack, brick dwelling; cost \$8,000; C. Wahking, builder. Park Avenue Baptist Society, brick church; cost \$11,000; H. E. Roach, builder. C. Jostes, brick dwelling; cost \$8,000; W. Reeve & Son, builders. Evangelical Reformed Church, brick; cost \$7,500. E. H. Warren, brick dwelling; cost \$12,000; T. C. Link, architect. H. Gaus & Sons Manufacturing Company brick planing mill; cost \$10,000.

St. Paul, Minn.—Architect C. A. Wallingford: For J. B. Morehead, frame residence; cost \$7,000. For E. H. Turner, frame residence; cost \$6,000. For Will E. Mathias, frame residence; cost \$4,000. For Chas. P. Johnson, frame residence; cost \$4,000. For H. H. Straub, frame residence; cost \$4,000. For C. B. Jones, frame residence; cost \$4,000. For Frank L. Williams, frame residence; cost \$2,000. All of the above to be built in St. Paul. All to have wood mantels, tiling, grates, plate and stained glass and plumbing except the last one.

Among the permits recently issued are the following, which call for an expenditure of \$5,000 or more: E. M. Dean, two-story frame dwelling; cost \$8,000. S. R. Perkins, three-story brick block; cost \$13,000. R. J. Reid, three-story brick block; cost \$15,000. Cathedral School Parish, three-story brick school building; cost \$38,000. Willias Bros., five-story brick store building; cost \$70,000. H. B. Farrell, two-story frame dwelling; cost \$8,000. H. B. Webber, two-story brick dwelling; cost \$9,000. P. P. Kopron, one-story brick store building; cost \$15,000. F. Lambrecht, three-story brick dwelling; cost \$9,000. Lutheran Congregation, one-story frame church; cost \$8,000. For St. Paul Gas Light Company, two-story brick building; cost \$10,000.

Tacoma, W. T.—Architects Farrell & Dormer have plans for Geo. B. Kandle, for a business block, to cost \$16,000. For Rev. Geo. H. Greer, residence, to cost \$8,000.

Taylorville, Ill.—Architect Geo. H. Helmle, Springfield: For Wm. M. Provine, two-story frame Queen Anne cottage; cost \$3,000; — Anderson, builder.

Terrell, Tex.—Contract for the erection of the Terrell lunatic asylum has been awarded to R. L. James at \$128,839.

Thomasville, Ill.—Architect Geo. H. Helmle, of Springfield: For Louis H. Thomas, two-story brick and stone dwelling house, sixteen rooms, steam heat, slate roof, wood mantels, stained glass, etc.; cost about \$13,000; S. A. White, of Bloomington, builder.

Toledo, Ohio.—Architect E. O. Fallis: For Public Library, brick building; cost \$40,000. For Mrs. V. H. Ketcham, brick dwelling; cost \$40,000; J. Stone, builder. Architect N. B. Bacon: For W. W. Tryon, brick dwelling; cost \$8,000. For Woolson Spice Co., brick addition; cost \$5,000. For J. C. Price, brick store; cost \$7,000. For J. D. Smead & Co., brick office building; cost \$8,000. For A. Newkom, brick dwelling; cost \$12,000. For R. B. Hubbard, brick dwelling; cost \$8,000.

Messrs. Thomas Emery's Sons, of Cincinnati, are building two brick blocks, to cost \$11,000 each.

Topeka, Kan.—Architect L. M. Wood reports: At Anthony, three-story school building, 80 by 140 feet; cost \$30,000, contracts not let. For W. C. Fisher, store building, 26 by 130 feet; cost \$12,000. For Col. John Brien, residence 65 by 80 feet; cost \$10,000. For Dr. J. N. Hibben, residence, 40 by 60 feet; cost \$5,000. For I. N. Baker, residence, 32 by 65 feet; cost \$4,800. For Mrs. J. M. Short, block of dwellings, 36 by 48 feet; cost \$8,000. For Mrs. A. V. Clughton, block of dwellings, 60 by 65 feet; cost \$14,000. For F. L. Stephenson, residence, cost \$6,000. For district 83, Shawnee county, school building; cost \$9,000.

Toronto, Ont.—Among the building permits recently issued are the following for buildings to cost \$5,000 or more: B. Hancock, two two-story and attic brick dwellings; cost \$10,000. W. G. Holcomb, four two-story and attic brick dwellings; cost \$12,000. Consumers Gas Co., two-story brick boiler house; cost \$50,000; also two-story brick meter house; cost \$20,000. Mr. Muir, two two-story and attic brick dwellings; cost \$6,000. Mrs. Lawson, block of two-story and attic brick dwellings; cost \$6,000. J. J. Blain, two two-story and attic brick dwellings; cost \$6,000. J. Waly, block of two-story brick dwellings; cost \$7,000. C. R. Rundle & Co., block of two-story and attic brick dwellings; cost \$20,000. T. V. Gearing, two two-story and attic brick dwellings, and one three-story brick store; cost \$10,000. Mr. Black, block of two-story and attic brick dwellings; cost \$6,000. J. H. McKinnon, two-story and attic brick dwelling; cost \$6,500. Mr. Sharp, two brick houses; cost \$7,500.

The Toronto University are to build a \$45,000 addition.

The Toronto Normal School are to spend \$20,000 in improvements.

Trinidad, Col.—Architects Bulger & Rapp have plans for a two-story brick and stone city hall and engine house, 22 by 60 feet.

Contract for the erection of the Las Animas county jail building has been let to McFall & Co. for \$16,200.

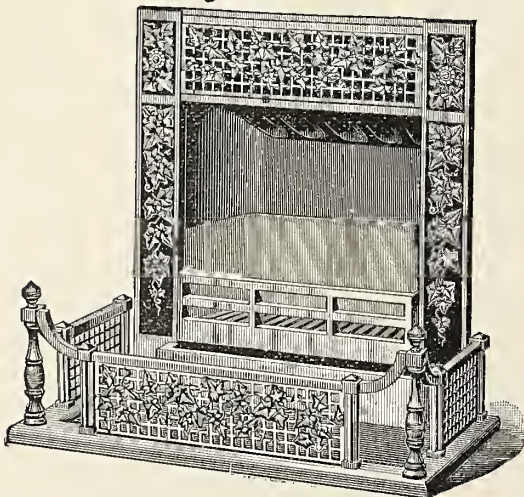
Waukesha, Wis.—Architect Henry J. Van Ryn, of Milwaukee, has prepared plans for a two story stone store and flat building, for Mr. Land; cost \$7,500.

Wichita, Kan.—Architect W. R. McPherson has plans for a brick and stone court house, 100 by 198 feet; cost about \$450,000.

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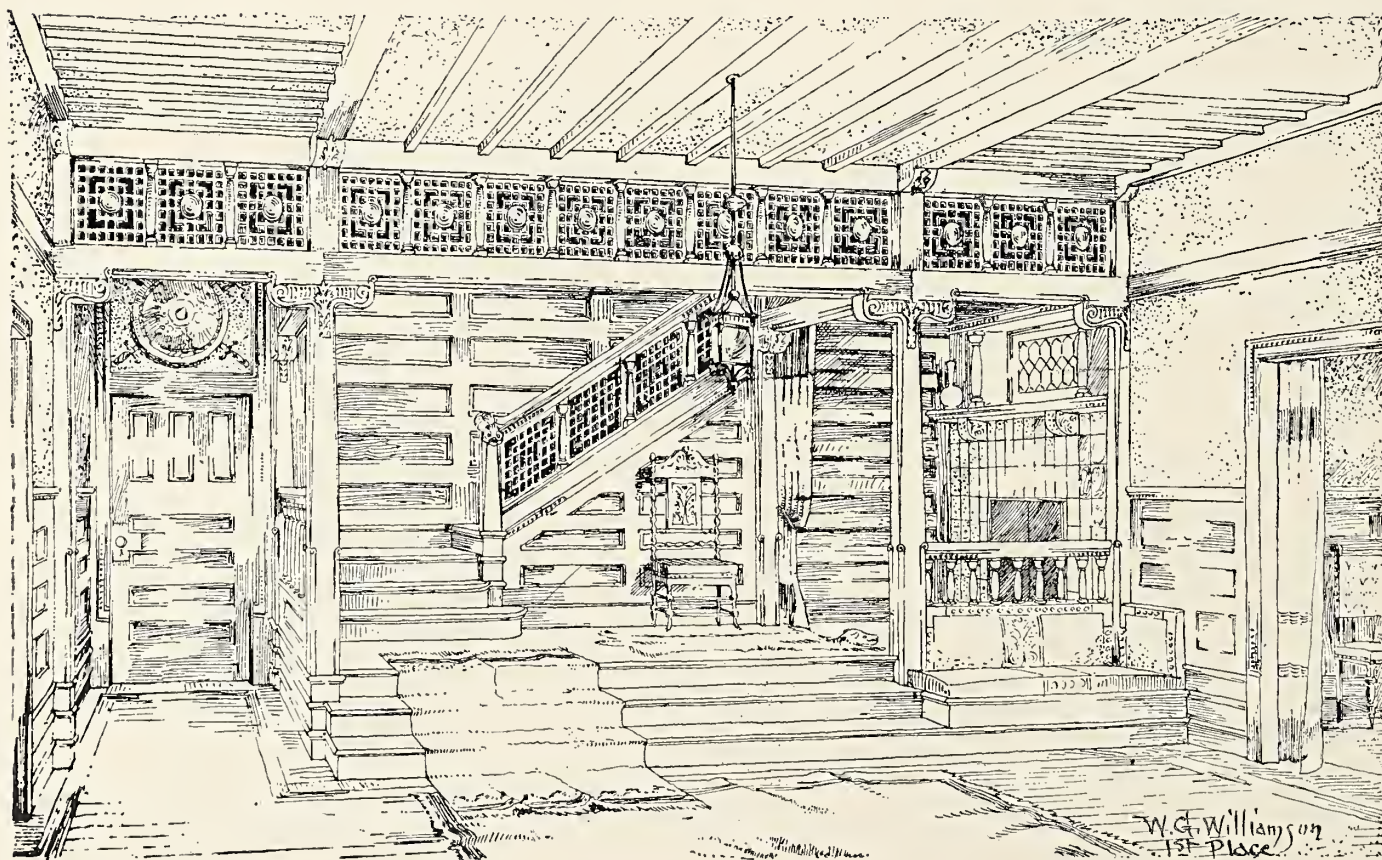
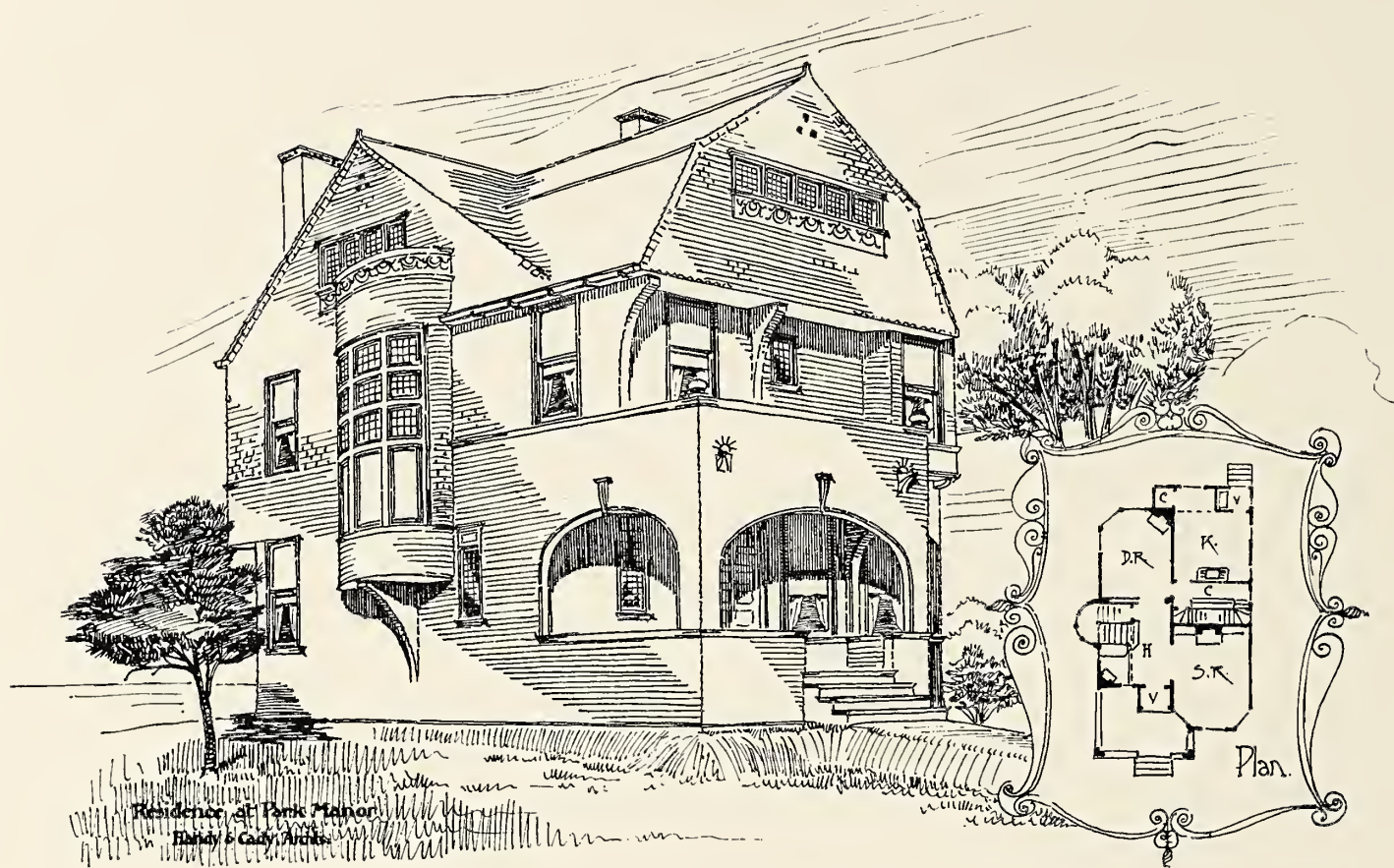


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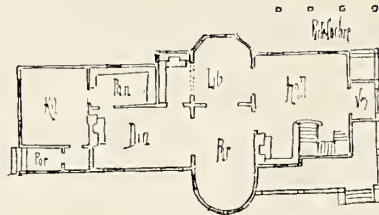
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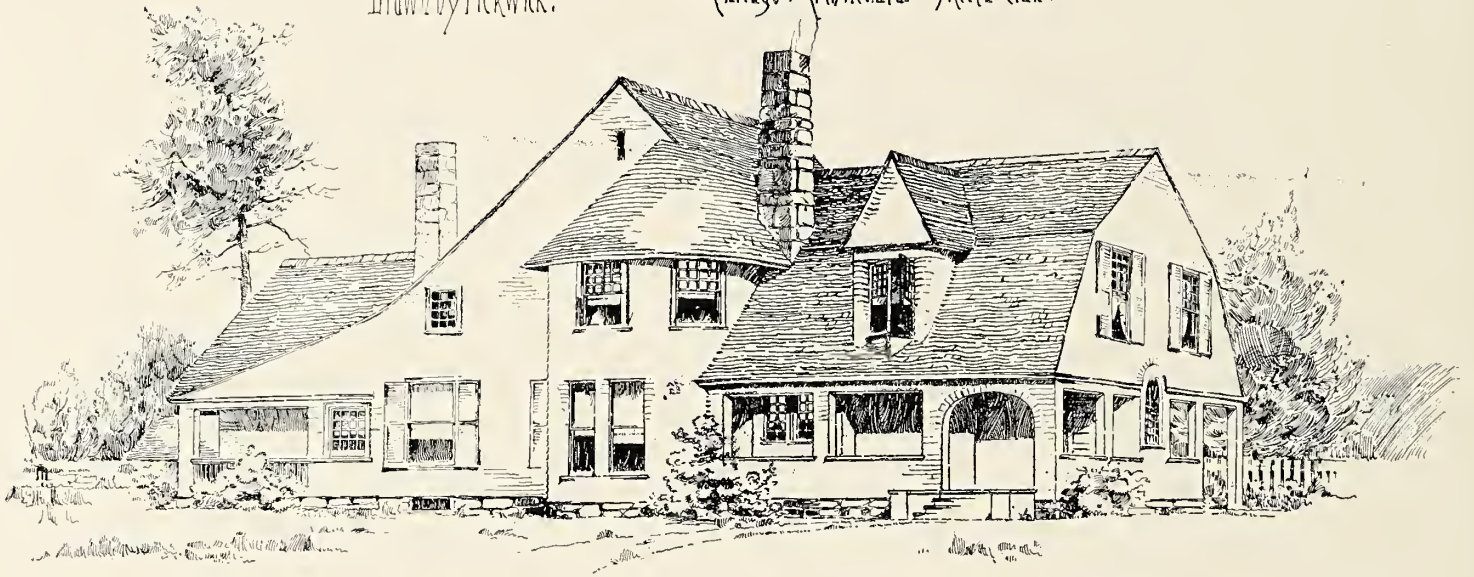


Rear View.

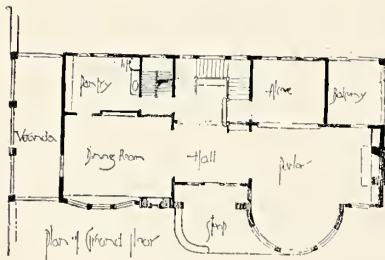


Plan

Eight Room Frame House Competition.
 Drawn by Pickwick. Chicago Architectural Sketch Club.



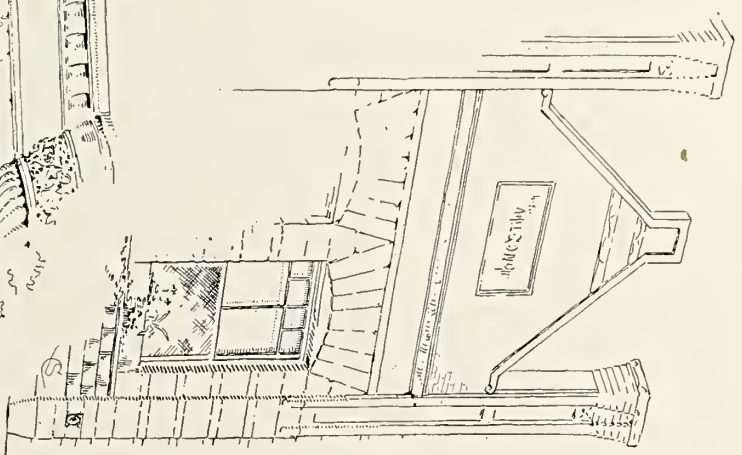
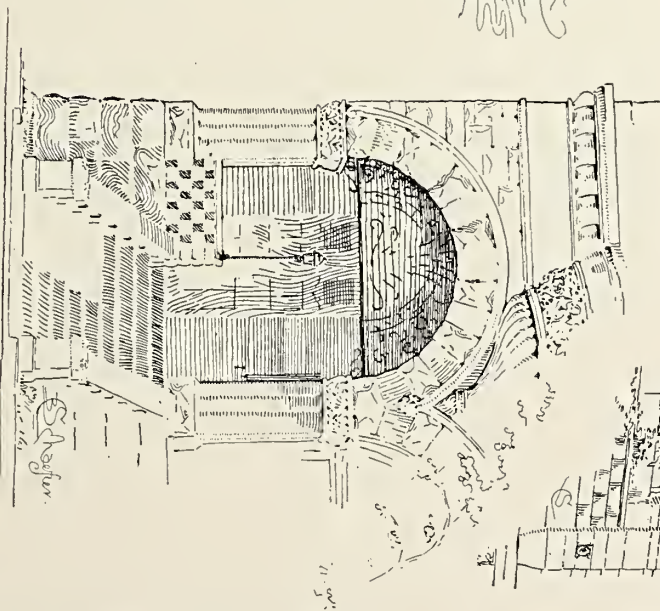
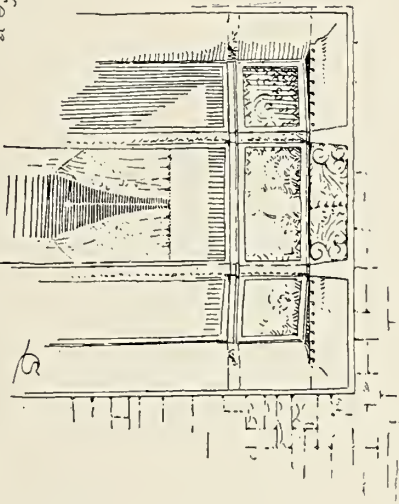
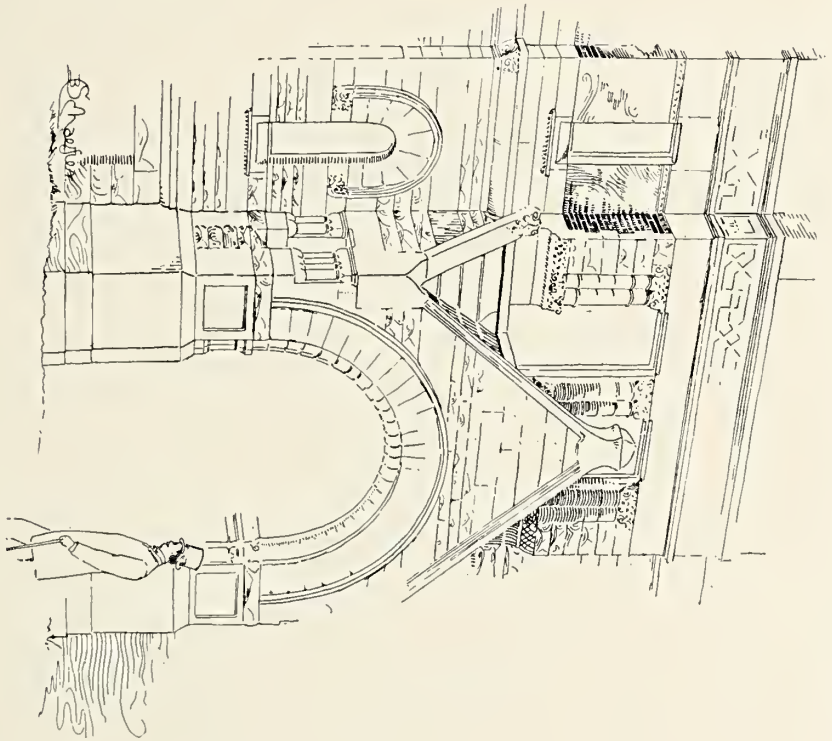
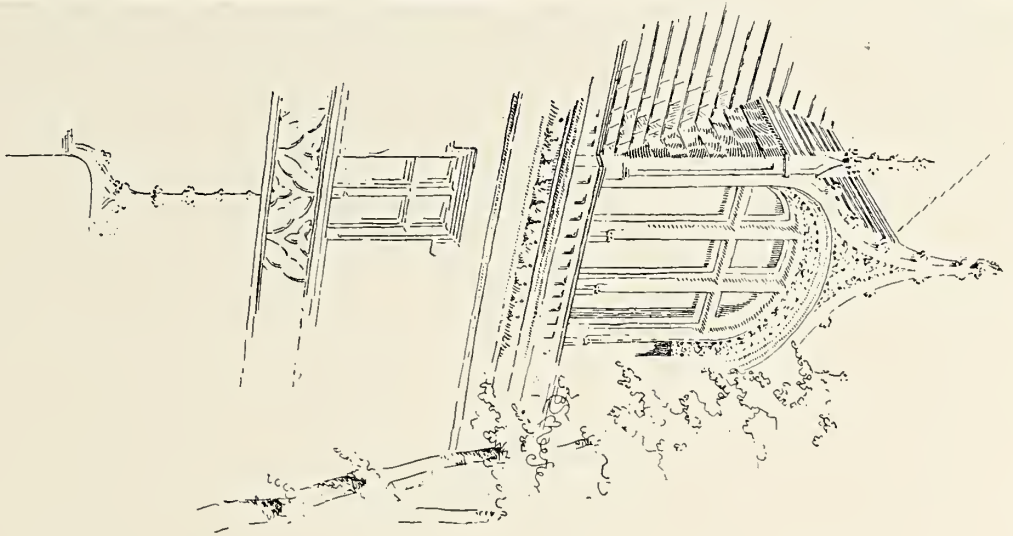
1st Prize
 To Frankel

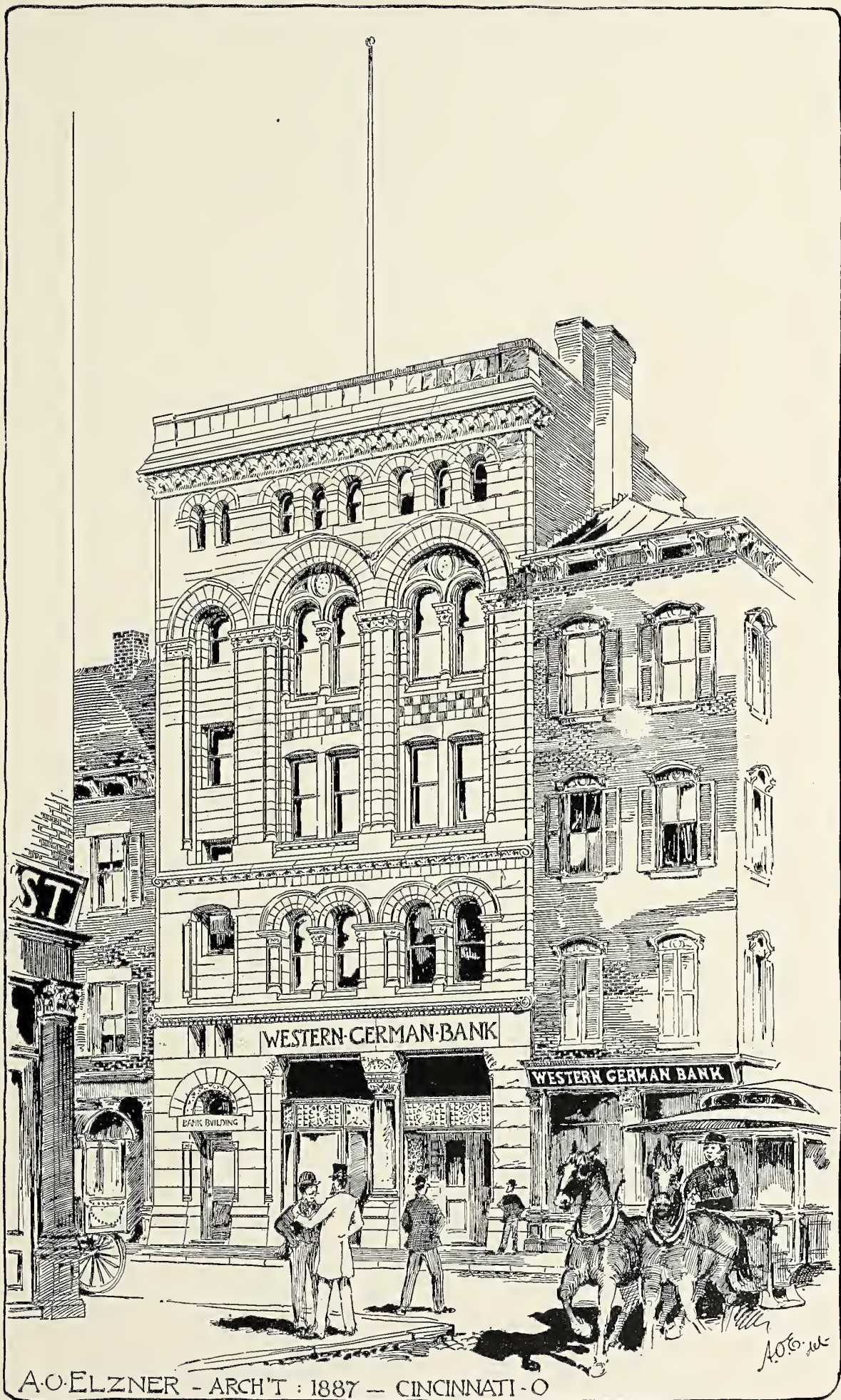


Chicago Architectural Sketch Club
 "Eight room stone house"

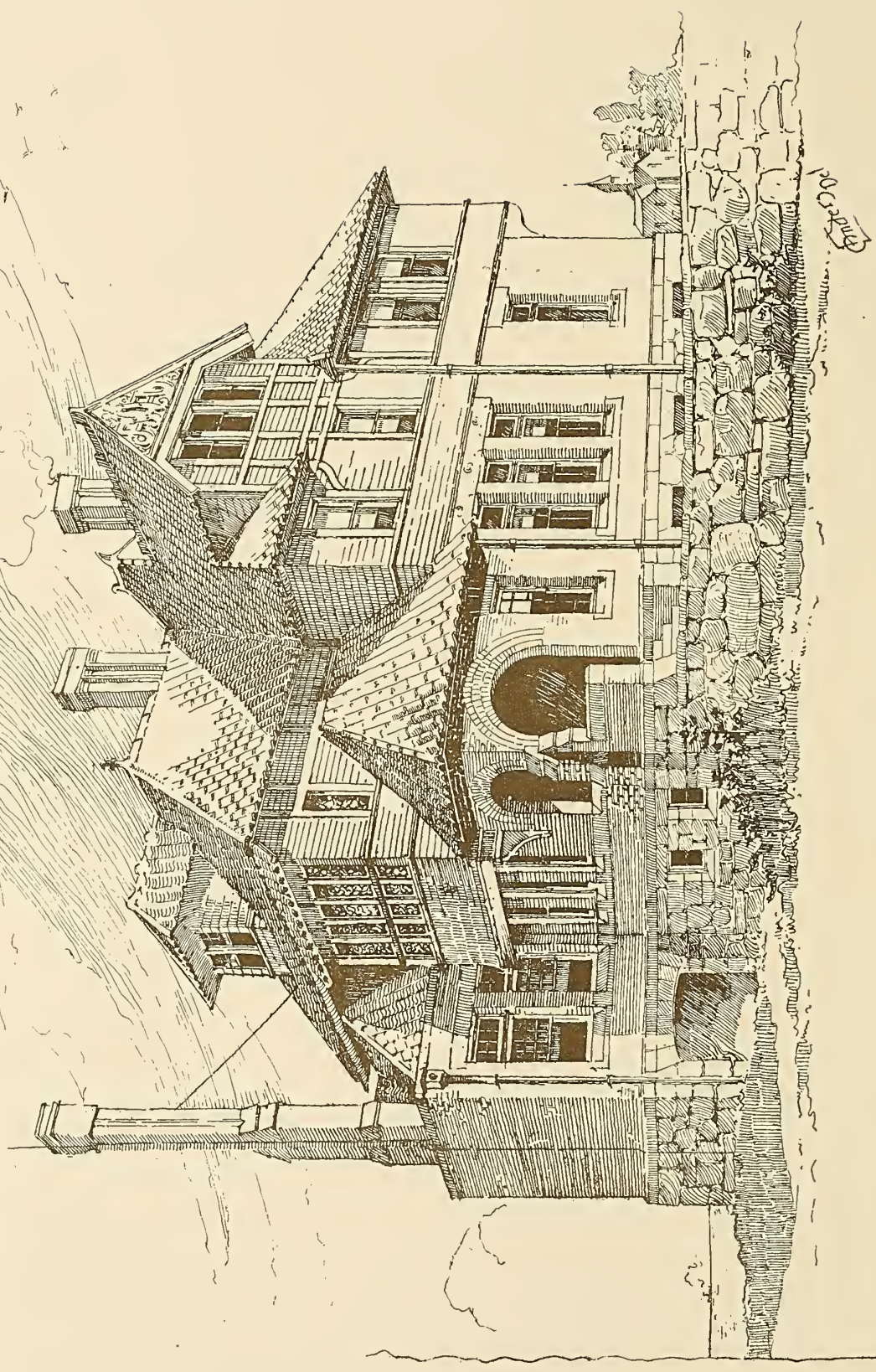
2nd Prize.
 W.B. Mundie.

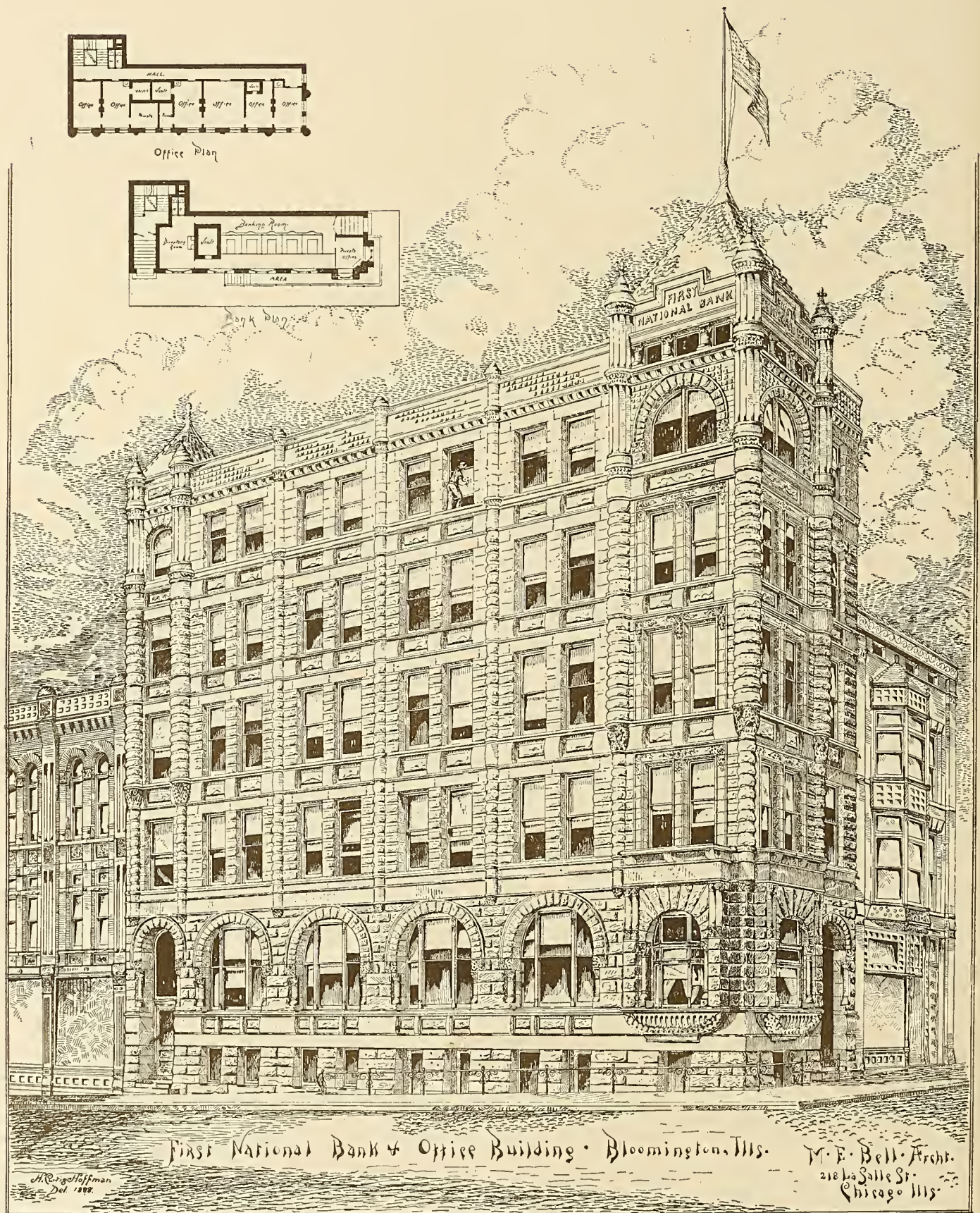
Sketches-
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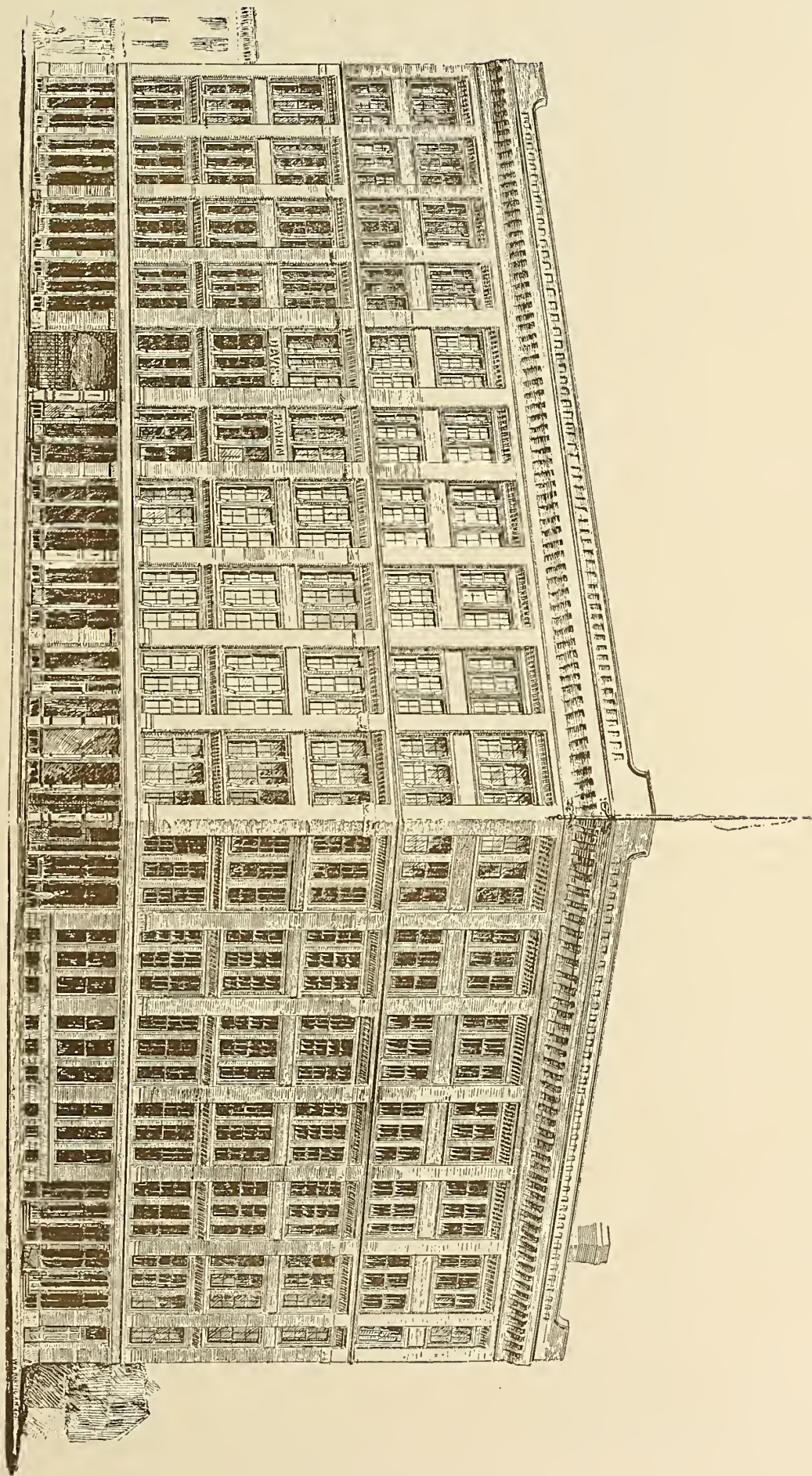


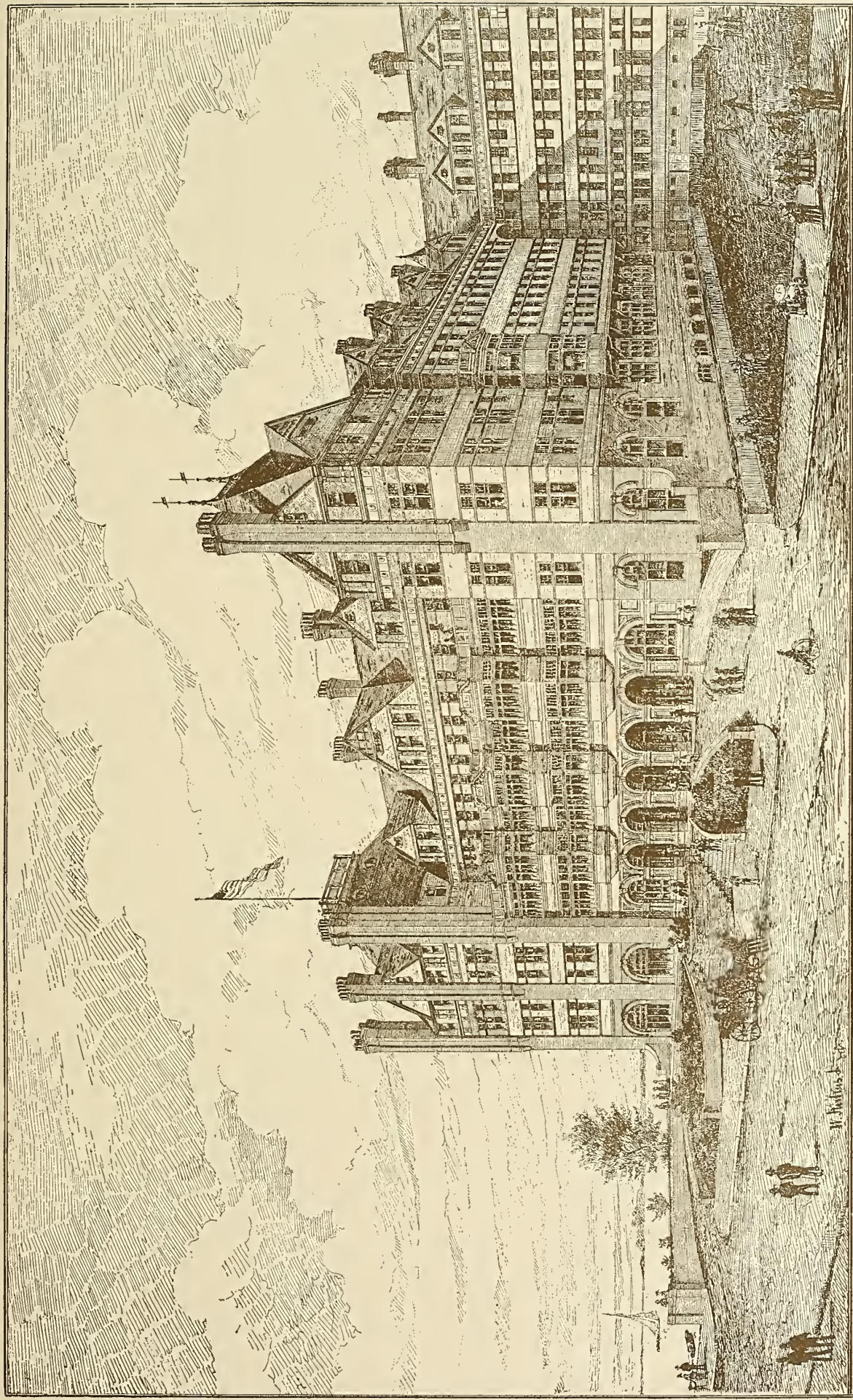
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Architects
Washington, D.C.
Oct. 1857

OCTOBER, 1888.

THE INLAND ARCHITECT
AND NEWS RECORD.

A Monthly Journal (with an Intermediate News Number) Devoted to

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THE publishers of THE INLAND ARCHITECT, because of the constant demand upon them for perspective drawings, have decided to open a drawing office in which this work can be executed. Orders will be received from this date. The conditions will be watercolor and line drawing by the best draftsmen, and absolutely prompt delivery.

THE twenty-third annual meeting of the American Institute of Architects, judging from our latest information, will be, if anything, more enjoyable than any since the memorable meeting at Nashville in 1885. The entertainment committee is composed of the Buffalo architects, without regard to association affiliations, who, in conjunction with Secretary Carlin, of the state association, have made extraordinary efforts in the line of entertainment. The sessions will be held in the Buffalo Library Building, commencing at ten o'clock A.M. of Wednesday, the 17th instant. A banquet at the Niagara Hotel, Thursday evening, at which a welcoming address will be delivered by Mr. E. C. Sprague, will be a feature of the proposed visit to the Falls. The following circular has been issued regarding the exhibit of drawings:

BUFFALO, N. Y., August 30, 1888.

The American Institute of Architects will hold its next annual meeting at Buffalo, N. Y., October 17, 18 and 19, 1888, and in connection with the meetings of the Institute will be held an exhibition of architectural drawings. If you have any drawings or sketches that you are willing to loan for this exhibition we will be much pleased to show them. The cost of packing, transportation and insurance will be defrayed by this committee, and every precaution will be taken to protect from injury all drawings that may be sent to us. All drawings should be received on or before October 10, and should be addressed to D. D. Benson, 390 Main street, Buffalo, N. Y.

Per order of Committee on Drawings.

H. C. BURDETT,
E. A. KENT.

As the time is brief, all drawings should be immediately expressed, so as to arrive at Buffalo not later than October 15.

THE annual meeting of the Western New York State Association of Architects has been postponed from October 7 to October 16. It will be held in Buffalo the day before the meeting of the American Institute of Architects. Secretary Carlin has furnished us the following information:

The annual meeting of this association for the current year will be held at the Library Building in Buffalo, October 16, at two o'clock P.M.

The Genesee Hotel has been selected as headquarters, and offers members a rate of \$3 per day on the American plan, or room without board for \$1 per day.

The date of this meeting has been changed by the Executive Committee to accommodate the annual convention of the American Institute of Architects which will be held at the same place October 17, 18 and 19. The Committee of Arrangements, on behalf of the Institute, extends an invitation to all members of this association to attend the meetings of the convention and participate in the entertainment provided for that occasion, which it is expected will include a trip to Niagara Falls, a drive about the city, and other interesting and instructive details of the programme.

The election of officers for the ensuing year, reports of standing committees, and other important business will, it is hoped, make a very interesting meeting for all who attend.

The Institute Committee of Arrangements have very kindly extended a cordial invitation to all members to remain and participate in the deliberations and enjoy the entertainment provided, and it is hoped that this feature of the meeting will be productive of a full attendance. It is certain that the Buffalo architects are making the greatest effort possible to provide for the entertainment of all guests, and that the second annual meeting of this state association will be large in numbers and representative in character.

THE annual meeting of the Illinois State Association will be held on Monday, the 15th instant. At the last session of the association, the time of meeting was changed to the second Monday after the first Tuesday of each month. Other changes in the by-laws were made, the more important one being the change of the right of final appeal from the Executive Committee, heretofore directed to the Board of

Directors of the Western Association, to the association. Besides the election of officers for the ensuing year, the annual meeting will be of general importance, as the plans for the reception of the coming convention of the Western Association will be discussed. A matter that should engage the attention of the association at an early date should be the enforcement of present laws regarding what is commonly known as the smoke nuisance, and also the erection of fire escapes. The former is directly within the province of the association, because of the destruction both in appearance and in structure of the finest architectural work, and the latter as an adjunct to the supposed individual efforts of all architects in the direction of safe buildings.

THE members of the joint committee which framed the standard contract, as well as the associations they represent, should feel greatly complimented and encouraged by the favorable comments that have been made upon it by the architectural and building press, all representative journals having printed the text in full. But few criticisms have been made, and those regarding the wording rather than the spirit of the document. Not only in this country has the contract been discussed, but in Europe it has excited no small degree of interest. In a long dissertation upon the subject, the *British Architect* says: "It comprises sixteen clauses, which for the most part appear fair to all parties concerned * * * We may note as the more important provisions the stipulation as to payment for alterations or additions set out in the drawings and specifications on which the contract is founded * * * The three arbitrators to be appointed by the architect and contractor, and that the architect shall be the sole arbitrator as to the interpretation of the working drawings * * * One other point is worthy of notice—at the end of clause 2 there is this condition: 'It is mutually understood and agreed that all drawings, plans and specifications are to remain the property of the architect.' This is a very proper and satisfactory stipulation * * * and the insertion of such a stipulation in the form of contract under notice is in every respect a wise one." Although it is too soon to hear from the architects and contractors who have used the contract, the general impression is that it is a signal advance in building procedure in this country. In this we are also firmly of the opinion that had the contract been full of flaws, instead of being probably as nearly perfect as such a document can be framed, it would still be of immense value as a starting point from which would grow a uniformity of action in the legal aspect of building. That this is already assured can be in a degree estimated by the orders that have been received by the publishers from all parts of the United States and Canada, from the Atlantic to the Pacific coast. When Mr. Greeley said "the way to resume is to resume," he voiced an axiom that is worthy of obedience in relation to the uniform contract. Every architect and every contractor in the United States should at once aid this movement toward uniformity by ordering a sample lot and setting aside all old blanks, giving the uniform contract a thorough trial.

THE representative architectural press, as stated, has commented very favorably upon the standard contract, full text of which was published in *THE INLAND ARCHITECT* for September, and have had no words but of praise for the efficient and impartial manner in which the committees of the American Institute of Architects, the Western Association of Architects and the National Association of Builders have discharged their responsible duties; but one publication, a Chicago journal, has spoken to strongly condemn. It

would be expected that a journal so profuse in its professions of disinterested devotion to the building fraternity would find much to comment upon in the provisions of such an important document as the standard contract, framed and adopted by committees having the full confidence of the great associations they represent, and given entire power to act. Not so with this one. Its comment is a senseless tirade against the committees, in which is characterized as illegal their action in adopting what, in their wisdom, they knew to be the best method to introduce and sell the blanks. The objects sought by the committees, and secured by the arrangement they have made, are uniformly low prices to all; a high quality of material and workmanship; the absolute avoidance of inaccuracies in wording and punctuation in every blank sold; a royalty on the sales that shall cover the expenses to the associations caused by the standard contract form; and to secure these ends, the complete control of the publishers by the licensors, as far as the contract is concerned. Added to this, the licensees, the Inland Publishing Co., having the exclusive publication for a term of years, are warranted in making extraordinary efforts to introduce the blanks and push the sales by liberal advertising, and by its traveling representatives; efforts which would not be made if the publication was scattered, and not in the hands of one firm, for "what is everybody's business is no one's business." The joint committee have done their work thoroughly, faithfully and intelligently, and no scurrilous comment, inspired by jealousy of the success of a contemporary, can diminish in the slightest degree the hearty approval they deserve of their associations and of the architects and contractors throughout the country. This is not the first time this ingrate editor has repaid with detraction and abuse the courtesy which has permitted him to continue a member of the architectural associations contrary to their rules.

IN a supplemental report upon the fall of the tower of the Church of the Covenant, at Washington, Building Inspector Entwisle, after giving as his opinion that the collapse was due to the insufficient bonding between the outer and inner courses in the piers, has called attention to the insufficiency of municipal building inspection, and inferentially the same upon the part of architects. While, for public safety, the assistants to the local inspector of buildings should be capable and sufficient in numbers to insure a thorough inspection, the architect, on his own account, should be even more careful upon this point, upon construction going on at a distance. At home he has the work under his own eye. He knows the ability and integrity of the local contractors, and can govern his inspection accordingly; he is also more apt to be fully conversant with the peculiarities of local conditions, materials, etc., all of which, of course, are factors in the successful carrying out of his plans. For these and other reasons he takes extraordinary risks by not employing a special superintendent upon each building he has under construction at a distance. This superintendent should be the best money can procure, and should be selected from the ranks of successful contractors in a line of work similar to that under construction, whose experience and integrity is personally known to the architect. We would venture to say that this superintendent need have little knowledge of engineering other than a capability of thoroughly understanding plans, for the plans should be perfect when placed in his hands, but he should be active, vigilant and in command of all practical knowledge pertaining to his business. All this, of course, costs more money than could be allowed from the five per cent commission of the architect, a commission now

much too low a compensation for the work involved in the designing of most modern buildings. This superintendent should be paid for by the owner and be a part of the stipulation of the architect, as much as his five per cent for services, which includes superintendence, but not of the continuous kind, which we are taught is necessary by the recent accidents to buildings designed by capable architects, and of which the plans were pronounced perfect and the superintendence as general as called for by the contracts between architect and owner. Some members of the profession have already practiced this plan, and insist upon the employment of a special superintendent; but it is rather a measure of safety in the interest of the owner than the architect, as, while the owner receives the benefit of additional security, the architect is in no way relieved of the general superintendence called for by his contract as architect. The subject is a profitable one for discussion at the coming conventions, and may lead to a revision of the schedule rule that will be of benefit to the public as well as architects.

THE New York *Tribune* recently published an attack upon the supervising architect, furnished probably by its Washington correspondent, alleging certain evasions of the civil service law in his conduct of the office and appointment of employés. The truth of these charges we have no means at hand of knowing, except that Mr. Freret can, and many of his employés should be able to answer the question quoted from the examination of applicants. But if these charges are no more accurate than this and the closing paragraph, they can be set down as the ignorant or maliciously false utterances of an irresponsible newspaper correspondent. The paragraph says—

Another of Mr. Freret's appointees is one Mosier, who, it is said, wasted \$2,800 in preparing plans for the public building at Detroit, and which had to be torn up they were so bad. Since then he has not received any work to do. He continues, however, to draw \$7 a day all the same.

In the first place, Mr. Moser (who is probably the gentleman meant, not Mosier) was appointed by Supervising Architect Bell almost two years before the present incumbent was thought of for the position, and served the office faithfully during the former gentleman's administration, as he has since, being kept in the office by Mr. Freret because of his ability as an architect, and not from political influence of any kind. The design for the Detroit postoffice has been thoroughly criticised by the architectural press. The plans were for a \$500,000 building, and were only preliminary studies. The work cost the office about \$1,100. The appropriation since has been largely increased, and new plans were commenced before Mr. Bell vacated the office. As for the former plans being destroyed, we have the best assurance that they have not been. Mr. Moser is still not only employed in the office, but no architect—for few are better known to members of the profession than he—will doubt that he is the most industrious employé in the supervising architect's office. We have taken pains to refute these charges, not because of their importance—for such reports are invariably inaccurate if not malicious—but because the work of the supervising architect is so generally misrepresented. It is too cumbersome for any one man to conduct unaided. The members of congress have little conception of the amount or importance of the work involved, and will not allow the government architect sufficient help for the economic and successful conduct of the department of building. Mr. Freret is doing all one man can to conscientiously carry on the work; but if any criticisms like those referred to be true, it is only another argument in favor of the change in the administration of the office advised by the bill formulated by the architectural associations and now before congress.

Boston Sketches — The Public Buildings.

BY C. H. BLACKALL.

BOSTON is a city which is not apt to strike one at first as being architecturally interesting in its public buildings. There is so little show about the street architecture, and so little attempt at what is termed in studio slang architectural fireworks, that a stranger dropped in the city, without a knowing guide to direct his studies, would be very apt to think of Boston as having really very few monuments. Of course, this does not apply to the churches, which are too pronouncedly interesting to fail in making their presence felt at once; but the public buildings certainly do not give one an idea of all there is in the city, and it is only by looking them over, one by one, and comparing with other cities that it is possible to appreciate the quantity of really interesting work there is in this department. It might be too much to claim that the general excellence of the civic architecture is so high that the public buildings do not shine by contrast; for, in fact, the tone of the Boston buildings is very sober and quiet; but from whatever reason it may be, the most lasting impression left on the mind of a stranger after a flying trip to the Hub is one of architectural poverty; and this, too, notwithstanding that Boston really has proportionally more fine public buildings than any other city in the country, Washington alone excepted.

The center of attraction to architectural pilgrims will always be the region about Copley square, the name applied to the little irregular space around which are grouped Trinity Church, the Art Museum, and the coming public library, three buildings which, when the series is completed, will be as different in every respect as could possibly be imagined; Trinity Church, with its wealth of semi-gothic conceptions, its magnificent Romanesque mass and bold central tower, which, notwithstanding all that has been said in praise of later work, still remains in some respects the *chef d'œuvre* of Mr. Richardson; the art museum, a confused, unrestful Italian-gothic design in brick and tortured terra-cotta, by no means unpleasant in its mass and general scheme, and in some respects not altogether bad in detail, and yet somehow possessing an uneasy, ill-balanced feeling which seems to be at eternal war with the peace and dignity of Trinity; while the public library, by Messrs. McKim, Mead & White, which is to complete the square on the side directly opposite Trinity, presents a design in the most severe forms of the Italian Renaissance, a design which has been studied as only Mr. McKim can study, and perfected to the very highest pitch, so that Boston may confidentially hope from it a building which will be truly a monument and a pride, not only to the city but to the country. Such are the great buildings about Copley square. Unfortunately all the architecture is not worthy of the place. The Art Museum is at present being extended and enlarged in a style which is totally at variance with the existing portions, and is neither dignified nor refined—a weak, liney example of modern English gothic. The old Art Museum was fussy enough, but this addition is positively discouraging. Directly opposite, on the remaining corner of the square, is a huge apartment house, a building in which all the features of a picturesque cottage have been reproduced on the scale of a public monument, and the result is clumsy and undignified in the extreme; and yet, after all, these are minor deficiencies, and are lost in the beauty and dignity of the square as a whole. Surely there is no other city in the country which can show a finer display of public buildings in so small a space.

Copley square is the center of a very rich architectural district. Close by is situated the picturesque new Old South Church, which will be noted in a subsequent paper. Around the corner is Mr. Emerson's art club, a quaint, odd little bit of design in one of the architect's happiest moods; and immediately behind the public library is a group of buildings, including the Harvard Medical School, a well-balanced, carefully-studied composition by Van Brunt & Howe, the Athletic Club, a more recent structure, mostly in brick, the Spiritual Temple, and the Normal Art School. Beyond the other side of the square toward the Common are the buildings of the Institute of Technology. The sketch published herewith shows the principal building of the institute, a finely proportioned example of the best phase of Italian Renaissance, a building which has stood the test of years, and which has always been considered one of the best in the city; so pure in its conception and details that it is very often confounded with the classic work of the colonial period, though executed by an architect who has but recently ceased his active labors on earth, Mr. Jonathan Preston. On the corner below the Institute of Technology, only a block from Copley square, is the new building of the Young Men's Christian Association, erected from the designs of Sturgis & Brigham. In style, this building is the most unique of its kind in the city, and approaches more nearly to the traditional forms of Queen Anne or Dutch architecture, with its stepped gables and pronounced roof, than anything which has been produced in Boston of late years, though the details and some features of the arrangement are more Romanesque than classic. On the whole, it is a pleasant design and is very generally admired.

Copley square lies at one side of what is specifically designated as the Back Bay district, including that portion of the city which has been reclaimed from the waters of the Charles river. The only public building in this region besides those previously noted is the nearly completed Algonquin Club house, of which a sketch is published herewith. The designing of this building was given to McKim, Mead & White, after a close competition, about two years ago, and the Boston architects have been awaiting with much interest the appearance of the new club house. All who know the work of this firm will be quite prepared for something considerably better than the average. A club house is really a difficult problem to treat, calling as it does for a building which shall be both public and private in its character—more than a large dwelling, yet not a hotel—a part of the life of a fashionable residence quarter, and yet more public than any residence ought ever to be, though retaining a conservative character which should effectually distinguish it from even the best of private hotels. No one will deny that McKim, Mead & White have succeeded in giving the building the character of a club house, and yet, somehow, the particular character peculiar to the Algonquin Club and to the locality does not seem to show itself. The design has an obtrusive air, a lack of local and special fitness, as though the problem had been studied too abstractly. This may be largely due to the cold tones of the façade, which is built entirely of very light stone, in striking contrast to the warm cherry-red brickwork in the buildings adjoining the club house, up and down Commonwealth avenue. On a busier street, in a gayer city—in Madison square, New York, for instance—such an objection would be entirely without reason. Boston people are trying to make themselves believe that they possess quieter tastes and a liking for more simple effects than mark the work of their knickerbocker cousins, and the sharply marked, clean-cut lines of the club house stand out too strongly for Commonwealth avenue. The old Somerset Club House on Beacon street, though making but little pretense to architectural effect, is so pleasing in its simple mass and unaffected dignity, that many people, without indulging too deeply in analytical criticism, would consider it more in accord with the assumed character of the Algonquin Club.

In every other respect, however, the club house has been very successful. The details are excellent, carefully studied and well disposed about the façade, while the horizontal divisions are very knowingly thought out. It is a real delight to note the contours of the moldings and to see how harmoniously the Italian Renaissance feeling has been wrought into every feature, from the bold rustications of the basement to the microscopic inscription tucked into the frieze under the cornice. It might be objected that the entrance is too small and unimportant, and that the generous proportions of the central windows are more pleasing than the cramped dimensions of the tall bay windows; still we can, perhaps, judge better of these points later on, when the building can be considered with reference to the interior as well as the exterior. In any case, this club house will easily rank as one of the best thus far produced by American architecture.

One of the prides of Boston is the Boys' Latin High School, erected some years ago from the plans of Mr. Clough. It is, all things considered, perhaps the best arranged public school in the country, besides being architecturally of considerable interest on the exterior. It is a design in a semi-modern French spirit, worked up in brick and stone, with a good deal of effective massing and disposition of parts, and with much more care in the details than we usually expect of such work. It easily ranks as one of the most interesting works in the city, though it is rather out of the line of ordinary visitors, and we fancy few of the architectural travelers see it. Another building which is still more neglected is the city hospital, on Harrison avenue, a structure which is planned and designed in a broad, comprehensive manner, which is a refreshing contrast to the miles of dusty brickwork one must pass in order to reach it.

The railroad stations of Boston are, as a whole, far from being a credit to the city, either as works of architecture or of engineering. The Boston & Albany road has built for itself a number of very interesting stations, mostly designed by H. H. Richardson or Shepley, Rutan & Coolidge. These are scattered through the suburbs and along the main line, but the boom has not yet reached Boston. Indeed, the only station worthy of note is that of the Boston & Providence Railroad, which is really a very successful building. It is happily located so as to bring the tall, commanding clock tower on the axes of two important thoroughfares; and the interior is no less successful than the outside. There is a fine waiting room, open to the roof, spanned by heavy wooden trusses, and leading to a generously proportioned train house more than six hundred feet long, with a roof upheld by light iron trusses, having a single arched span of over one hundred and thirty feet. It is one of the few really architectural railway stations in the country, and it pleases in spite of its details, which are of the half-formed gothic which was so much in vogue ten or twelve years ago. The massing is so good and the interior effects so pleasing that it takes something a great

deal worse than bad details to quite spoil it. Peabody & Stearns were the architects. Plans are being prepared for a new union station for the roads entering the city from the north. This building, we understand, is to be as nearly perfect as it is possible to make it, and a selection of Winslow & Wetherell as the architects is sufficient guarantee of the excellence of the design.

The Unitarian Building, of which a sketch is published herewith, is a very interesting little bit of stonework, situated about a block from the new State House on the crown of Beacon Hill. The two fronts are entirely of brownstone. The motive of the building is taken presumably from the Riccordi Palace in Florence, inversed, however, in that the lower story is made with smooth-cut ashler, while the upper stories are left with rock-faced work. The Unitarian Building has a fine hall in the upper story, of moderate dimensions, but very pleasing in its effects. This building was designed by Messrs. Peabody & Stearns.

The list of interesting public buildings might be extended considerably beyond this. There is the recent addition to Young's Hotel, a carefully studied piece of French Renaissance work; the Bijou Theater, of semi-mooresque treatment, now unfortunately degraded to the level of a cheap dime museum, though still adorned with the marvellous electric chandelier which was manufactured for the Sultan of Turkey; the postoffice, too, one of Mullet's productions, is not without considerable grandeur in some of its proportions, though the effect is utterly spoiled by the rankest kind of detail which has been used so freely over the building, and the custom house might almost be classed with the old work of the city, being a right pleasing Greek design, crowned by a low dome. The interior is very successful for its kind, the main feature consisting of a handsome domed hall, surrounded by a noble colonnade of white marble, with corinthian capitals. But without the aid of sketches or photographs these buildings can only be alluded to; they must be seen to be appreciated, and moreover, hidden as so many of them are among buildings of a coarser nature, they must be studied to be appreciated. Boston is not lacking in good work. There is not a great deal of money expended in public buildings, nothing like the amounts that are so freely lavished in other cities; still, we question if the result is not quite as satisfactory as a whole.

The Fallen Church Tower.

BUILDING INSPECTOR ENTWISLE has made a supplemental report on the fallen church tower at Washington, at the suggestion of the commissioners. The following is Inspector Entwisle's report: *To the Hon. Commissioners of D. C.:*

GENTLEMEN,—Having referred the report of the commission appointed by you to investigate all the circumstances connected with and pertaining to the falling of the tower of the Church of the Covenant, at the corner of Eighteenth and N streets, northwest, on the 22d of August, and having served on that commission, I can state from my own knowledge that the report is, in every particular, a true history of the case.

The paragraph in that report stating that "in view of the fact that the inspector of buildings of the District of Columbia is a member of the commission, and in the absence of further or more specific instructions as to the form of their report, your commission request that they be relieved from expressing their views as to the efficiency or completeness of the official inspections," seems to call for an explanation. Being a member of the commission by your order, and considering that my responsibility in the matter would no doubt be questioned, and feeling that I should not in the least attempt to control the views of the remainder of the commission, the above paragraph was inserted with my assent, and, in justice to myself, it is proper that I state my connection with the structure as inspector of buildings. My first inspection was when the plans were submitted to this office. The walls and piers were found to have ample capacity, and the report of the commission states this to be a fact, and advises that the tower be rebuilt upon the same plans. The provisions being ample, the permit was issued.

My next connection with the building was to make an examination of the foundation, especially that being placed to carry the tower. There was a slight defect in the earth at this point, which was remedied by removing the defective portion and which insured a bearing on solid earth, and there has been no motion in the foundation. I visited the church several times during its construction, and especially after the Ohio stone in the base courses on the outer face commenced to crush, and, as I stated to the contractor at the time, I accounted for the crushing at this point by the facestone and courses being laid with a fine joint and the interior of the wall or rubble work being built with a heavy, compressible joint; and, as I also stated at the time, that the dimensions of the piers being of ample capacity for the load imposed, I felt no apprehension as to its safety. The faces of the walls had the appearance of being well built, and the mortar joints sufficiently hard on the face, but the recent examination showed that the walls were not properly bonded or built. The result was that for want of bonding, principally, the outer and inner thickness separated, causing the piers to collapse. It was impossible to judge the construction in that particular, and their construction could only be safely insured by having a competent inspector on the building at all times to see, in detail, the mortar properly made and the walls at every point properly bonded and substantially put together.

There was no superintendent employed, and the architect, as well as myself, was deceived as to their construction. He certified to the work

and allowed it to go on. No such building should go on without constant supervision, which the district cannot be expected to furnish. So much is this office convinced that a constant supervision is necessary that we place upon every school or other building, when being constructed by the District of Columbia, a superintendent, to control their construction at every point and in every detail. Without additional assistance on the general city work it is impossible for this office to make close inspections of private buildings. I have each year, in my annual report, called the attention of the commissioners to the absolute necessity for additional help. I am required to be in the office from four to five hours each day to pass upon plans submitted and attend to all the routine office work; being charged with the repairs of all buildings owned by the District—one hundred and two in number—and, under the law, with making plans and supervising the construction of all new buildings, the care of all private parkings and the re-numbering of houses; and, until last month, provided with but one assistant on general city work, and more than half his time taken up in the answering of complaints. It is clear, as I have frequently stated, that without additional assistance I could not be held accountable for defective constructions. Congress, at your earnest request, has this year provided one more assistant, but, to properly control the construction of buildings, there should be at least three more. It would be to the advantage of the public, and money well appropriated.

A Draftsman's Trip to Europe.

IN a letter to the *Engineering and Building Record*, in answer to a draftsman's inquiry, Mr. T. M. Clark, of Boston, writes the following, which so clearly and practically answers the question regarding cost and route for a trip in Europe, that it is worthy a more extended publication:

BOSTON, September 15, 1888.

SIR,—Your correspondent, "Draftsman," can see a great deal of Europe with \$900. How much, will depend on his willingness to put up with a little hardship, and his familiarity with foreign languages. For the ocean voyage he will need from \$20 to \$100 each way, according to his style of traveling. If he is not afraid of his dignity, he can go out from America very comfortably in the steerage at any time, and can return so in winter, when the ships are not crowded; or he can get second cabin berths for \$40 to \$45, or first cabin from \$60 to \$130.

After arriving, the main thing is to keep away from Americans. Throughout England there is a system, managed something like our Young Men's Christian Association, of coffee-room lodging houses, whereby one may get rooms for a day or two, or longer, good and clean, for a shilling (24 cents) per day, and have his meals at restaurants, of which there are all sorts; or there is an ample choice of furnished lodging-rooms, generally indicated by a card in the window, at all prices.

On the continent it is usual to take a lodging, of which there are scores in every street, and live at restaurants. Continental restaurants, away from the American and English quarters, are generally good and cheap.

For a day's stay the hotels are most convenient. They are on the "European" plan, in most parts of the continent, rooms and service costing from 50 cents a day upward, while meals *a la carte* can usually be had in the hotel restaurant. Outside of Paris, the cost of living at a good hotel and taking meals there would be about \$3 per day for a single man of modern tastes, but this can be greatly reduced by going to less ambitious restaurants. In Paris it is safest to get a room in a good hotel, but meals can be obtained at a fraction of the price charged at the hotel by going to restaurants, particularly the "Etablissements Duval," of which there are twenty or thirty in different parts of the city, and a room at a Paris or London hotel carries with it no obligation whatever to take meals there.

Baedeker's guides will usually give lists of the hotels in each town, with the prices charged at each, but the foreign railway guides often have lists which give names and addresses of pleasant little hotels more modest in style and price than those mentioned in Baedeker. As to the language, a knowledge of which is indispensable to one who wishes to travel cheaply, very little is really required. If "Draftsman" will get Baedeker's Manual, ask someone to tell him the pronunciation, and learn the dialogues *by heart*, he will get along very well in France, Germany, or Italy, after a day or two, although his diction may not be extremely polished.

To study the Renaissance, he should go practically everywhere. The London buildings and the Elizabethan work in and outside of London ought to be studied, as well as the modern French work in Paris, and the modern German buildings in Berlin, but he will find, perhaps, the greatest charm in the Loire Valley at Orleans, Tours, and among the sixteenth century châteaux; and he must, of course, go to Italy. The pleasantest route there is via Marseilles, which takes one through a region full of interest to the architect.

In traveling, it is best to take local trains, first, second or third-class, according to taste. The express fares are higher, the cars more crowded, the dust more disagreeable, and there is less chance than in the slow trains to sketch from the windows, and observe the ways of the natives. The cost of traveling first-class is about as high as that of traveling here in a Pullman car. According to my experience, there are just as many fleas in the first-class as in the third-class cars, and the cost of traveling in them is about three times as large. The great multitude of respectable people travel either second or third-class. Some roads have only two classes of cars, and it is common in England to see the station agent, after waiting in vain to sell tickets for his empty first-class cars, put a card on them marked "second-class," and fill them with second-class ticket holders.

If "Draftsman" wishes to get the most he can for his money, let him arrange his route before he starts.

If he will send \$1 to the Imprimerie Chaix, Paris, he can get, including postage, a copy of the latest "Livret Chaix" for France, and the "Livret Chaix Continental," containing maps, time-tables of all trains in France and the rest of the continent, fares by each class, and information about excursions, baggage "omnibus a domicile," and other conveniences which the happy Europeans enjoy. The "Continental Bradshaw" gives nearly

the same information, but more condensed, and can perhaps be had here. If not, any bookseller will order it, and, with the "Bradshaw's Guide for England," it will cost about the same as the Chaix books.

Having these in hand, with a good set of Baedeker's guides, let him spend his winter evenings in planning his route. The time of arrival at each place, hotel to go to, price of carriage fare—if he needs a carriage—time of departure for the next place, with cost of ticket, should be written in a little vest-pocket book. The railway time-tables are rarely changed in Europe, and with his little memorandum book he can tell in a moment whether the cabman is trying to cheat him by overcharging, whether his ticket is right, and at the right price, so that he is sure of going to the place he intended, and will save himself, by keeping to his programme, nearly all that retracing one's steps, missing things that one ought to see, and so on, which the inexperienced traveler in Europe usually has to go through.

Moreover, the memorandum book ought to have notes, gathered from all the sources at hand, of the principal buildings to be seen in each place. "Fergusson's History of Architecture," including the volume on "Modern Architecture," will be useful for this; the "Baedeker" will supply something, and technical books and periodicals and inquiry will do the rest.

As to photographs, the best and cheapest are usually to be had on the spot. Italian photographs are particularly good and cheap, and near every building of importance in Europe is some little shop where photographs of the building are to be had. Braun, in Paris, near the Opéra, has photographs in great variety, but at high prices. Micusement is the principal photographer for the châteaux on the Loire, Naya in Venice, Wilson of Aberdeen for English cathedrals, the London Stereoscopic Company, and so on, but it will often cost less to go to a place and buy photographs on the ground than to get them in the great cities.

New York Art Schools.

THE various large art schools of New York threw open their doors October 1, and instructors and art students began work for the season of 1888-89.

Naturally the busiest places for the day were the offices of the schools, but quite a number of students settled down before their easels in the class rooms.

Young women in numbers perambulated about the halls and up and down the stairways and elevator leading to that portion of the Cooper Union where the Woman's Art School is located, and Principal Susan N. Carter and others connected with the management had their hands full. Work began in the woman's school in the morning, while the students in the male school assembled for the first time in the evening.

At the Art Students' League, President Horace A. Bradley reported that there was a larger number of applicants than last season at the opening, and that there was every prospect of another successful school year. Several new studies and life drawings have been hung in the class rooms, which are the work of former students of the league now studying abroad. Among them are three examples of the work of H. L. Levy, who stood at the head of the list in the late Paris Beaux Arts life class competition. One of these drawings, which he, like the others whose work is hung, presented to the league, is that which placed an American for the first time at the head of the Beaux Arts list.

Professor Wilmarth was back in his place at the National Academy schools after his long vacation, and expects good attendance. The School Committee met on September 29, and, after examination of drawings, admitted sixty students. The modeling classes will probably be this year in charge of Olin N. Warner. The number of applicants for admission is about as usual, President and Manager John S. Sharp, to whom the Gotham art students owe so much for his untiring efforts on their behalf, is confident that institution will have a stronger corps of students than ever before. H. S. Mowbray's classes began work and Charles Mente is expected to take charge of his shortly. He will also look after those of Emil Carlsen, who will be detained in San Francisco until the new year by a commission he has to decorate the interior of the residence of a California banker.

Manager Arthur L. Tuckerman, of the schools of the Metropolitan Museum of Art, expects that there will be a hundred students at work shortly and that there will be full four hundred during the year. There were nearly that number last season. The two floors of class rooms have been somewhat rearranged, and Charles A. Vanderhooft's classes in illustration and etching have already quite a full attendance.

Superintendent J. W. Stimson, of the newly founded New York Institute for Artist Artisans, was found full of hope for the success of the first season of this venture. The well-lighted rooms are now being arranged for the use of the students, and the classes will be organized by the end of the week. The designing classes will be instructed by George Wharton Edwards and C. Diel, the modeling one probably by Olin N. Warner, and those in drawing, color and composition by Mr. Stimson. Later in the season the superintendent expects to start classes in textile work, under Mrs. C. M. Wheeler, in jewelry and wall-paper designing, and in work in stained glass. A number of prominent firms who have sent in checks will have the privilege of nominating students, and some seventy of those who took Mr. Stimson's side in his fight at the Metropolitan Museum schools have already enrolled themselves at the new institute.

The classes of the Society of Decorative Art will not open until November. Mrs. Goodyear will instruct in china and watercolor painting, Mme. Flory in fan painting and Mrs. Stone in drawing and designing.

THE large opportunity for producing pleasing exterior effects by varicolored shingled roofs and gables at one time in vogue, but which died out through non-durability of the coloring matter employed, is again coming to the front, especially with the eastern architects, since the introduction of what is known as "Dexter Bros.' English Shingle Stain," which, it is claimed, has the quality of remaining intact in the coloring under all climatic conditions. This stain is made in a variety of tints and hues, affording a large field for the display of artistic taste.

Illinois State Association of Architects.

THE Illinois State Association of Architects held its regular meeting—pursuant to the June adjournment—Saturday, September 29, at No. 65 Washington street.

After luncheon, and before organization, while smoking their havanas, an informal discussion, or rather running conversation, relative to the uniform contract, which has just been promulgated by the committees of the Western Association, American Institute, and National Builders' Association, was participated in by most of the members present, and it was generally conceded to be equitable and satisfactory.

The hour for business arriving, President Samuel A. Treat called the association to order, and the minutes of the previous meeting were read by Secretary Berlin, which were approved.

President Treat: The report of the Executive Committee is now in order.

W. W. Clay (chairman): Mr. President, the Executive Committee has several things to talk about. They are under three or four proper headings, under which they might come up for discussion today. First, the proposed amendments to the constitution and the by-laws, of which each member has probably received a copy. Then there is a second question to be considered, regarding permanent quarters for holding our meetings. A third, the question of a protective league; and fourth, the subject of the next convention of the Western Association, which is to be held in this city in November. I would first like to talk a little about this last subject. I would say the Executive Committee has not considered the subject regularly, but I thought that it ought to be brought before you, as the time for the convention is approaching. For my own part, I do not know that it is necessary for us of the state association to do anything at all, as the Board of Directors of the Western Association is perfectly capable of taking care of it themselves. Besides, all of us, at least the most of us, are members of that association, and as such will contribute to the general fund—and I think the Illinois State Association of Architects will probably in this case contribute a greater amount than any other, if not as individuals, as members of that association. It is a question as to whether we shall tax ourselves double—first as members of the Western Association, then as members of the Illinois State Association. My notion is to leave the matter entirely with the committee of the Western Association—if for no other reason, as an act of courtesy. I should like to hear from the members present their views before we proceed to the other subjects for discussion, to learn what they think upon this point.

President Treat: I think there are very few, if any, who are members of this association who are not members of the Western Association, and they will have ample opportunity to contribute toward the expense of the convention. I think it will be proper to leave the matter to that association, and then if we saw proper to act, we might with a good grace after the Western Association had decided what it will do. I would like to hear the expression of the members on the subject.

Mr. Hill: Has this association been invited to take a part?

Mr. Clay: Not as an association. The idea is that of our being the host; but they are not strangers to us, and I think we are so blended with them we can afford to let the Board of Directors of the Western Association have the matter entirely in their own hands. I don't think it is necessary for any motion expressive of this to go on record.

After some further expression of opinion in the same direction the matter was dropped for the present meeting.

Mr. Clay: The next topic I have to present is the Protective League. The Executive Committee, in accordance with your directions, have sent out a large number of circulars to the various architects, but, unfortunately, they did not make them a "time contract" with their correspondents for a return of their views on the subject. We have, however, received twenty-one or twenty-two answers. We think by next month we will be able to make a full report, as we shall send out an additional short circular limiting the time for answers to come in, and by that means hope to be able to quote from a large number of responses in that report. The next topic is a regular room for meeting.

After considerable discussion, participated in by Messrs. Treat, Hill, Patton, Clay, Beaumont, Raeder and others, in which several schemes and suggestions were offered relative to the adaptation of the room occupied to permanent use, it was decided, upon a motion by Mr. Hill, sustained by an unanimous vote, to lease the room occupied by the meeting upon the terms stated, or upon the best terms it can be had at, until the 1st of May, 1889, at which time it was proposed to secure permanent quarters elsewhere.

Mr. Clay: Now, Mr. President, the changes proposed to be made in the constitution and by-laws are in order. The best way will be to take them in the order they are presented.

Mr. Hill: I move the adoption of the first amendment:

Section VI, clause 3 (constitution). All appeals from the action of the Executive Committee shall be to this association.

Mr. Clay: I second the motion.

On being put to vote by the chair, the motion carried.

President Treat: Article I, clause 1 of the by-laws is next in order.

There shall be a regular meeting on the last Saturday afternoon of each month, from September to June, inclusive.

Mr. Clay: It has been suggested that some other day would be more satisfactory.

Mr. Hill: I move to make it the third Tuesday of each month.

President Treat: I suggest the third Monday would be a better day.

Mr. Clay: Make it the second Monday after the first Tuesday.

After considerable further discussion, the amendment was, on motion, carried, changed to read:

ARTICLE I. There shall be a regular meeting of this association on the second Monday after the first Tuesday of each month, from September to June, inclusive.

The question of the hour of meeting was left to the call of the secretary.

President Treat: The next proposed amendment is to Article III of the by-laws, which reads:

ARTICLE III. Any person desiring to become a member of the association will be presented with a blank form of application, which will conform in every respect with that used by the Western Association of Architects, and the election to this association shall be by an unanimous vote of the Executive Committee, appeal from which may, however, be taken to the association.

Upon motion of Mr. Patton, seconded, the article was adopted, and subsequently, upon a motion to reconsider by Mr. Beaumont, was amended, adding to the original text the following sentence: "The application of no person shall be considered who has been rejected within a year."

On motion of Mr. Clay, Article IV of the by-laws was omitted.

President Treat: Article V of the by-laws, reducing the initiation fee from \$15 to \$10, is next before you. It reads:

ARTICLE IV. All active members of the association shall pay an initiation fee of \$10; all active members to pay an annual due of \$15. Dues to be payable semi-annually; and no person shall be entitled to vote at any meeting whose dues remain unpaid.

President Treat: Article V now becomes Article IV, as the former Article IV has been omitted.

On motion of Mr. Clay to adopt, it was carried by an unanimous vote.

President Treat: Article VII now becomes Article VI. Are you ready for the question?

ARTICLE VI. All officers of the association shall be elected at the October meeting of the association. They shall be elected by a majority ballot vote of the members present. Officers shall be elected for terms of one year, except for members of the Executive Committee, who shall be elected for terms of two years, and two members shall be elected each year.

Upon being put to vote, the article as read was adopted.

Mr. Clay: I move, Mr. President, that the Executive committee be empowered to have prepared a sufficient number of copies of the constitution and by-laws with the adopted amendments and changes, so that each member may be furnished with a copy of the revised edition.

The Executive Committee was so empowered.

Upon a question of information which was raised from a personal experience by Henry Raeder as to what course an architect should pursue to protect his reputation, in a case where his plans were changed by the owner to the detriment of the building, and how far he could be held legally responsible for any damage from accident in consequence, it was generally conceded he could not be held legally responsible, and that if such building should succumb to the inevitable in spite of the architect's protest, it would rather add to his reputation than take from it, when the facts became known, as they were very likely to be in these days of newspaper enterprise.

Some other unimportant matters were referred to, and the meeting adjourned to October 15, which will be the annual meeting.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary. Annual meeting, October 17, at Buffalo.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1889, at Philadelphia. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the second Monday after the first Tuesday of every month. Annual meeting, October 15, 1888. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting, October 16. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1889, at Dayton. F. J. Otter, Dayton, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. G. M. D. Knox, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October in each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. G. W. Williamson, secretary. Annual meeting, November 5, 1888.

THE NEW YORK ARCHITECTURAL LEAGUE.

Fifty members of the Architectural League sat down to dinner October 1, at Morello's restaurant, with Mr. F. Crowninshield in the principal chair.

They had a good dinner and a good time, and afterward held a business meeting and elected committees for their next exhibition, which will, like the last one, be held at the Fifth Avenue Art Galleries.

Among those present were Messrs. G. M. Huss, C. T. Mott, W. A. Coffin, C. I. Berg, W. C. Hazlett, J. A. Wright, C. T. Atwood, A. W. Brunner and A. D. F. Hamlin.

At the meeting the resolution offered relative to hiring and furnishing a suitable club house for the league was laid over, while another for incorporating the institution was carried.

The following jury was elected for the coming exhibition: Messrs. Richard M. Hunt, A. D. F. Hamlin, Charles F. McKim, Robert S. Peabody and T. P. Chandler, the three last not being members of the league.

A hanging committee was chosen as follows: Messrs. George A. Glaenzer, Edward M. Wheelwright and Charles B. Atwood. The following is the committee chosen for the league medal competition: Messrs. C. T. Mott, C. A. Rich, E. R. Tilton, C. F. McKim and R. S. Peabody.

The catalogue for the exhibition will have a cover designed by E. H. Blashfield, and will contain thirty illustrations.

The following circular announcement of the programme of the exhibit and proposed competition has been issued by the officers of the league:

ANNOUNCEMENT.

The Architectural League takes pleasure in announcing that it has instituted, in connection with its exhibition, an annual competition, open to all draftsmen in the United States under the age of twenty-five, the object of such competition to be the promotion of good designs and the improvement of draftsmanship.

As prizes, it offers to the designs placed first a gold medal, to be known as the Gold Medal of the Architectural League; and to the design placed second, the Silver Medal of the Architectural League.

The conditions for admission to the competition are:

1. That the competitors shall be residents of the United States, and under the age of twenty-five; and,
2. That the drawings shall be made in conformity with the following programme and, in all parts and portions, entirely by the hand of the competitor.

The drawings will be judged by a jury appointed for the purpose.

The successful drawings, and such others as may be thought worthy, will be hung at the exhibition, the first and second prize drawings being so indicated, and these latter shall thereupon become the property of the league.

JOHN BEVERLEY ROBINSON,
President.

FRANK A. WRIGHT,
Secretary, 47 Liberty street, New York City.

PROGRAMME.

For the second annual competition the following programme has been arranged:

The drawings shall exhibit the Tomb of an Illustrious Architect. The base course of the tomb not to exceed in area 144 square feet; the size of the plot, 25 by 25 feet.

Each contributor to exhibit two sheets of drawings; one to contain plans and elevations at the scale of one-half inch to the foot, and one to exhibit a perspective view. The plan and elevation sheet to be finished in line with India ink and the lining pen. No brush work on this sheet, except sections. No shadows are to be cast.

The perspective to be rendered at will. Each sheet to be cut to the uniform size of 24 by 32 inches, and to be white card or bristol board, or Whatman paper mounted on a stretcher. No colored borders, frames or glazing will be allowed.

Each sheet must be distinguished by a motto or cipher. A sealed envelope, bearing the same motto or cipher, must contain the name, full address, place and date of birth of the author, and must be mailed to the office of the secretary, Mr. Frank A. Wright, 47 Liberty street, New York City.

Drawings are to be delivered flat, carriage paid, on or before December 5, 1888, to Frank A. Wright, secretary, No. 368 Fifth avenue, New York City. They will be returned at the close of the exhibition at the expense of the contributor.

CHAS. T. MOTT,
CHAS. A. RICH,
ERNEST ROLLIN TILTON,
Committee.
JOHN BEVERLEY ROBINSON,
FREDERIC CROWNINSHIELD,
Ex-officio.

NOTE.—A copy of the above circular can be had by applying to E. R. Tilton, secretary of Medal Committee, 23 Warren street, New York City.

CHICAGO ARCHITECTURAL SKETCH CLUB.

At the regular meeting of the club, September 24, a full attendance of members were present to listen to C. A. Cassels' paper upon his recent trip through England and Norway. He vividly described, in a pleasant manner, the scenery of Norway, giving but little description of architectural work. This was criticized in the discussion which followed, and Mr. Cassel defended his position upon the ground that it was not wise to criticize such work as he saw during an extremely hurried visit, as nothing he could say could be accurate, and he thought it best under such circumstances to say nothing, decrying the practice so common, of writing a book upon a country after a three-weeks visit. His description of mountain scenery was vivid, and he cleverly, by a series of sketches, showed how mountain effects could improve design and add a breadth and dignity to it. The sketches shown bore out the statement.

After passing a vote of thanks to Mr. Cassel, the secretary made a brief report upon the club excursion to Milwaukee the week previous. The visitors found the drawings, one hundred in number, sent by the club to the Milwaukee exposition, all hang in a separate, well-lighted room, and each drawing neatly framed. The art department was under the management of Mr. Frank Enders, brother of Oscar Enders a member of the club, and by whom the visitors were most royally entertained. Mr. Enders, himself an artist of a more than local reputation, has made the art department a signal success. The secretary closed his report by moving that Mr. Enders be made an honorary member of the club, and stating that his ability made him eligible to regular membership. On the motion being put to vote, it was unanimously carried.

Our Illustrations.

Residence for S. N. Hurd, Kenwood, Ill., Geo. W. Maher, architect, Chicago.

Chicago Auditorium Building, Congress street elevation; Adler & Sullivan, architects.

Private Hotel, 414 West Tenth street, Kansas City, Mo., for C. G. Hopkins; James & James, architects.

First M. E. Church, Batavia, Ill.; S. S. Beman, architect. This church is built of split granite boulders of various colors and trimmed with buff Bedford rock-faced stone, and is finished in yellow pine. It is the gift of E. H. Gammon and D. C. Newton, bankers, of Batavia, Ill.; cost \$25,000.

Boston Sketches, Part II, Public Buildings.

Dining room interior; W. L. B. Jenney and W. A. Otis, architects, Chicago.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Business block for Marshall Field & Co., Chicago; H. H. Richardson, architect.

Residence at Bar Harbor, Me.; Wm. R. Emerson, architect, Boston, Mass.

Residence of Austin Smith, Chicago; Treat & Foltz, architects.

Residence of C. N. Fay, Chicago; Cobb & Frost, architects.

Residence of Miner T. Ames, Chicago; Cobb & Frost, architects.

Residence at Washington, D. C.; Marshall & Hornblower, architects.

Residence at St. Louis; Fuller & Wheeler, architects, Albany, N. Y.

New Publications.

COMMON SENSE IN CHURCH BUILDING. Illustrated by seven original plates; By E. C. GARDNER. Published by Bicknell & Comstock, N. Y.

An entertaining, popular dissertation on church architecture, written for the million by the author of "Homes and How to Make Them," "Illustrated Homes" and "Home Interiors." The subject is treated through a series of colloquial letters from imaginary persons interested in the construction of a church edifice, and from a supposed architect. The trend of the work is against the prevalent style of construction in which "high art" is the apparent object in view, and in favor of a more practical method, wherein true beauty and simplicity may be blended, and at the same time the bane of church organizations—extravagance in expenditure, is eliminated. In a word, a church building that will come up to the full requirements for which it is intended without bankrupting the society or making it a perpetual alms-beggar. The design or designs offered or suggested are of the circular form for auditoriums, and provide by other rooms for the social concomitants of religious bodies. Perhaps many architects will find ideas that have haunted them here repeated, yet all may find it a profitable investment of time to give it a careful perusal.

SKETCHES ABROAD, Made during a Nine Months' Tour through a part of Spain, Italy, France, and the South Kensington Museum, A.D. 1886. By JULIUS A. SCHWEINFURTH, architect, Boston. Published in portfolio by Ticknor & Co., Boston. Price \$15.00.

This is a very refreshing and valuable contribution to architectural literature, by an observer whose education in his chosen profession, and fame as a skillful and spirited draftsman, are a sufficient guarantee that it is something more than commonplace. The work comprises thirty heliotype plates, 15 by 20 inches, which are not bound, but are laid loosely in a portfolio of soft, pale brown canvas, with an embossed title in gold. They are made direct from pen and pencil sketches, and brush work, and embrace domestic, as well as ecclesiastical selections, all drawn in that breezy, spirited manner which commands admiration. Among the good examples of old European houses, the most striking, perhaps, are the Manoir Bures Londoniers, Manoir Verger, and Manoir Boisy Mangis. The courtyard of the old house at Lisieux, is also excellent. Architects, and craftsmen, too, will appreciate the painstaking in the drawing of the gateway of the Bishop's Palace at Sens, noticeably in the mass of foliated detail; pose of the quaint figures; jointing of the stonework, etc. Also in the ceilings at Bourges and Evreux. In fact, throughout the collection, whether in the larger or in the choice bits of detail, the educated eye and master's hand are apparent. Nor is this all. It can be said that many of the things appear for the first time to the American public, as Mr. Schweinfurth seems to have taken pains to go out of beaten paths, and to have found his novelties in the avoided provincial and obscure towns.

The work will be found of much value to architectural students and practicing architects. It will be strange, indeed, if the publishers do not find their edition of 250 copies soon exhausted.

Mosaics.

ARCHITECT Samuel A. Coon, F. W. A. A., formerly of Winfield, Kansas, has removed his office to Tacoma, Washington Territory.

CORRECTION.—Louis M. Wood is located at Topeka, Kansas, not Kansas City, as published in August number, and his sketch of A. O. U. W. Temple of Topeka, Kansas, on exhibition at the Cincinnati Centennial, is a watercolor.

A HANDSOMELY gotten-up quarto pamphlet catalogue of eighty-eight pages, by the Carton Furnace Co., of Utica, N. Y., presents the merits of the Carton heating furnace and concomitants. It is complete in letter-press and engravings. A thousand and more patrons commending the excellence of this furnace close the catalogue.

A CATALOGUE and price list of sanitary fixtures, which will be of interest to readers, is received. Heretofore there has been no provision made whereby other than an "expert" could clean the sediment or prevent the sewer pipes from clogging. The "Hygiene" enables anyone to apply ordinary hose and regularly flush the sewer, preventing the settlement of decayed animal or fecal matter, from which the deadly sewer gas generates.

The fitting should be applied to all buildings, as the extra expense is small and no change is necessary in present fittings or sewerage to connect the "Hygiene." For information or descriptive catalogues, George W. Murphy, 76 Dearborn street, may be addressed.

MURPHY & Co., varnish makers (New York, Cleveland, St. Louis and Chicago), have issued a "Political Manual for 1888," without any gloss. It contains the republican, democratic and prohibition platforms; the electoral college for 1888; the vote for the presidency from 1824 to 1884, inclusive; the presidential vote of 1884, in detail; population of the United States; presidents and vice-presidents from 1789 to 1885; emigration into the United States from 1856 to end of fiscal year 1888, etc. Price 10 cents.

RARELY is a testimonial so hearty and favorable as the following:

NEW YORK, September 15, 1888.

Mr. J. P. Frink, 551 Pearl Street, New York City.

DEAR SIR,—The magnificent reflecting chandelier, made from special designs, furnished by you and placed in the West Harlem, M. E. Church, corner 129th street and Seventh avenue, New York City, is simply grand. So neat, chaste and graceful in design that it commands the attention and elicits favorable comments from everyone who views it. It lights our main audience room abundantly with as pleasant a light as it seems to us possible to produce; we rarely use it to its full power. To say that we are delighted with the fixture would hardly express our satisfaction. Some of the members of our building committee are largely connected with the building interest in this city, and they each indorse the appropriateness of the fixture. Respectfully,

BARTLETT SMITH,
C. FRASER.

Railroad Notes.

FIVE harvest excursions have been inaugurated by the Burlington Route, C. B. & Q. R. R., which will sell from principal stations on its lines, on Tuesday, August 21, September 11 and 25, and October 9 and 23, harvest excursion tickets at half rates to the farming regions of the West, Southwest and Northwest. For tickets and further information concerning these excursions call on your nearest C. B. & Q. ticket agent, or address P. S. Eustis, general passenger and ticket agent, Chicago.

A BEAUTIFULLY printed and lithographed pamphlet has been issued by the popular tourist railway, the Wisconsin Central Railway, descriptive of Fox Lake, Illinois, and its environs. The illustrative plates are all produced from photographs by the photogravure process, and the beauties of this celebrated fishing, hunting and general place of recreation is described in the text with vivid minuteness without exaggeration. Though little is said about the Wisconsin Central Railway service, this is an important factor in the popularity of any summer resort. The service of this railway is preëminently superb. The coaches are the best made, and every employé seems to understand that passengers are guests for whose comfort as well as safety they are responsible. Send to H. C. Fuller, general ticket agent Wisconsin Central Railway, Chicago, and procure a copy of this bright little pamphlet.

THE popularity of the Wisconsin Central Railway, as a through route to St. Paul and westward to the Pacific, is well deserved, but this is only one of the many points in which it wins public favor. Its excursion business is large and varied. From the immense crowds of people it takes daily over its beautiful and picturesque line northward, whose destination may be anywhere from Fox Lake, Illinois, to Ashland, on Lake Superior, it caters to the tourist who wishes to go west in search of health or riches. It has for the season of 1888 inaugurated a series of harvest excursions to Minnesota and Dakota. The fare is one-half for the round trip, and tickets are good for thirty days, with stop-over privileges west of St. Paul. These excursions will leave Chicago on August 21, September 11, September 25, October 9 and October 23. Particulars can be obtained from the general ticket agent in any large city in the country, or by writing to the general offices at Milwaukee, Wisconsin.

A NEW Pullman palace sleeping car line between Chicago and Philadelphia has been established, via Chicago & Grand Trunk and Lehigh Valley railroads. The Chicago & Grand Trunk Railway announces to its patrons that, east-bound, commencing Friday, July 20, on their limited express, leaving Chicago at 3:25 P.M. daily, will be attached one of the most modern Pullman palace sleeping cars, to run through to Philadelphia via Niagara Falls and the Lehigh Valley route, arriving at Philadelphia at 7 A.M. daily on the second morning. Returning, west-bound, the car will leave Philadelphia daily at 8 P.M., arriving in Chicago on the Pacific express at 8:10 A.M. on the second morning. What should make this route particularly popular is that on the east-bound journey a stop-over at Niagara Falls of seven hours is allowed, and on the west-bound journey a stop-over of four hours, giving passengers ample time to visit the Falls. However, passengers not desiring to lay over at the Falls on the east-bound journey may change at Niagara Falls, taking a Pullman parlor and buffet car, leaving the Falls at 8:30 A.M., arriving in Philadelphia at 10:49 P.M.

MEMBERS of the American Institute of Architects who contemplate attending the convention at Buffalo, October 17, 18 and 19, will be glad to know that solid vestibuled trains now run over the Michigan Central, "the Niagara Falls Route," between Chicago and Buffalo. These trains are not only equipped with the finest Wagner palace sleeping cars, but are made thoroughly complete by having vestibuled dining, smoking, first-class and baggage cars, and although constituting the famous "limited" of the Michigan Central, carry all classes of passengers without extra charge. These trains carry through vestibuled sleeping cars between Chicago and New York, via New York Central & Hudson River Railroad, and between Chicago and Boston via New York Central and Boston & Albany Railroads. The east-bound "limited" also carries a through sleeper, Chicago to Toronto (via Canadian Pacific), where connection is made with parlor car for Montreal. Accommodations secured at the Michigan Central ticket offices, No. 67 Clark street, corner Randolph, and depot, foot of Lake street, Chicago. The limited express (a vestibule train), upon which there is no extra charge, leaves Chicago at 3.10 P.M., and arrives at Buffalo at 7.15 the following morning.

Synopsis of Building News.

Ann Arbor, Mich.—Architects Riper & Rhoads: For O. Behr, store and flat building, three stories, 23 by 60 feet; brick, with stone trimmings; cost \$5,000.

Appleton, Wis.—A. W. Patton will erect a three-story residence, for which the plans have been prepared; size 56 by 78 feet; cost about \$15,000.

Chicago, Ill.—Business with the architects continues in the same quiet way as reported last month. While few have all they can do, all have something in hand, so that Satan needs to go further than Chicago to find idle hands to work out his mischief-making scheme.

Architect J. J. Egan: For the Christian Brothers Community, four-story and basement school building, N. E. corner of Wabash avenue and Thirty-fifth street. Building will be 100 by 163 feet, with a central tower 125 feet high, and have sixteen recitation rooms, study hall, lecture hall, chapel, and dormitory for the Brothers. The basement will be of granite, and above Bedford stone; steam heat, electric lighting, and all the latest sanitary improvements; estimated cost \$100,000.

Architect Theo. Karls: For J. A. De Berge, two-story Bedford stone residence, 28 by 64 feet, at Deming court, Lake View; cost \$11,000. For A. Kleist, two-story apartment building, 21 by 70 feet, on Osgood street, near Centre avenue; cost \$5,000.

Architects Wilson, Marble & Lamson: For W. H. Thomas, apartment building, 72 by 82 feet, to be erected at University place. The front will be of St. Louis pressed brick with Bedford stone trimmings. The building will be finished in hardwood, have steam heat, speaking tubes, electric bells, stained glass, hardwood mantels, tiled vestibules and all modern sanitary improvements; cost \$15,000. For same, twenty cottages on Forty-fifth street, near Stock Yards, pressed brick fronts, with stone trimmings, mantels, electric bells, etc.; cost \$50,000. For J. S. Rainbow, two-story and basement flat building, 24 by 65 feet, pressed brick front, with stone trimmings, mantels, stained glass, electric bells, furnace, sanitary plumbing, etc.; cost \$7,000.

Architect Thos. Wing: For Bradner Smith & Company, six-story warehouse building, 50 by 150 feet, on Desplaines near Van Buren, pressed brick front, iron and terra-cotta trimmings, slow burning construction, iron columns and girders, heavy joists and floors; cost \$40,000.

Architect Julius Speyer: For the Town of Lake, District No. 2, three-story and basement fifteen-room schoolhouse, 93 by 143 feet, on Dearborn street, between Forty-sixth and Forty-seventh streets; cost \$44,165. For twelve-room and basement school house near Fifty-first street; cost \$28,333. For Greenwood Cemetery, two greenhouses, 35 by 125 each, stone, brick, iron, glass, etc., to be heated by steam.

Architect Robert Rae: For W. C. Nelson, five two-story frame and stone basement and attic dwellings, 32 by 37 feet each, to be erected at Park Side, hardwood mantels, furnaces, and all modern sanitary improvements; cost \$20,000. For Charles Steinberger, six one-story stores, 21 by 64 feet each, to be erected on Churchill street; cost \$10,000.

Architects Jenney & Otis: For West Side Park Commissioners, conservatory at Douglas Park; cost \$20,000. For H. M. Quackenboss, two-story and basement residence, Forty-first street near Vincennes avenue. Interior finish in California redwood, with all modern improvements; cost \$9,000.

Architect L. G. Hallberg: For J. F. Walsh, two-story and basement and attic residence, 40 by 42 feet, to be built on Bissell street, pressed brick with stone trimmings, rock-faced stone basement; cost \$10,000. For Dr. John H. Chew, apartment house, 20 by 60 feet, to be erected on Ohio, near State street; cost \$10,000.

Architect Henry Raeder: For Chamber of Commerce Company at Duluth. It will have two fronts, six stories on Superior street and seven on Michigan street, with area of 100 by 115 feet. First story will be constructed of brownstone, and above this will be pressed brick, with stone and terra-cotta trimmings. Will be provided with elevators, electric lights, and all modern improvements; cost \$200,000.

Architect W. L. Carroll: For T. H. Gault, three-story and basement flat building, 45 by 68 feet, to be erected on Lincoln, between Van Buren and Congress streets, rock-face basement; front, pressed brick, with stone trimmings; mantels, electric bells, and modern improvements; cost \$12,000. For Maxwell Brothers, two-story basement and attic residences, 50 by 64 feet, to be erected on Ashland avenue, between Harrison and Polk streets. They will have rock-face and cut fronts of St. Lawrence marble, furnaces, mantels, electric bells, speaking tubes, etc.; cost \$20,000. For Alice M. Kirby, four-story flat building, 37 by 100 feet, to be erected at 337 E. Indiana street, Bedford stone front, mantels, electric bells, speaking tubes, etc.; cost \$20,000.

Architect J. Krivanek: For W. Sadowski, two-story flat building, 22 by 70 feet; to be erected 854 Hermitage avenue; cost \$6,000. For V. Bures, three-story flat building, 21 by 64 feet; to be erected at 493 Lincoln avenue; cost \$5,000.

Architect M. T. McCarthy: For A. E. Cassidy, three-story flat building, 80 by 62 feet; to be erected on Wood near Polk street; pressed brick front, stone and terra-cotta trimmings; mantels, electric bells, speaking tubes and modern improvements; cost \$26,000.

Architects Addison & Fiedler: For J. S. Ford, Johnson & Co., six-story and basement warehouse, 92 by 160 feet; to be erected on the corner of Indiana avenue and Sixteenth street; pressed brick front, with terra-cotta and stone trimmings, elevators, etc.; cost \$60,000.

Architects Beman & Parmentier: For W. D. O'Brien, two-story and basement dwelling, frame, with stone basement; hot water heat, mantels, electric bells and all modern improvements; to be erected at Woodlawn; cost \$6,000.

Architects Ackerman & Starbuck: For International Terra Cotta Co., three-story building, 60 by 180 feet; to be constructed near New York City, of the company's material. For J. W. Ulm, block of flats, 25 by 80 feet; to be constructed on Twenty-fourth street and Prairie avenue; cost \$7,000.

Architects D. S. & A. Pentecost: For N. F. Chiniquy, two-story and basement dwelling, 22 by 65 feet; to be erected on Hoyne avenue, near Monroe street; front of Koosta pinkstone; hardwood finish, plate and beveled glass, mantels, electric bells, furnace, etc.; cost \$7,000.

Architect J. H. De Horvath: Three-story and basement store and flat, 100 by 92 feet; to be erected on the corner of Seventy-ninth and Sherman streets; construction of Tiffany pressed brick; cost \$35,000.

Architect C. A. Weary: For W. R. Martin, three-story store and flat building, 26 by 125 feet; to be erected on Thirty-fifth street, between Indiana and Prairie avenues; façade of cut and rock-faced marble, with polished and carved granite columns, copper bay, stained and beveled glass, wood mantels, electric bells, tubes, etc.; cost \$15,000.

Architect R. G. Pentecost: For Henry Sweet, two two-story residences, 21 by 53 feet; to be erected on Ellis avenue, near Fifty-fifth street; pressed brick fronts, with green and brown stone trimmings; furnaces, mantels, stained and plate glass; electric bells; hard oil finish and all modern improvements; cost \$10,000. Three two-story and attic residences, to be erected on Warren avenue and Kedzie street, similar in construction to above; cost \$18,000.

Architect J. H. Huber: For Thos. Parker, three-story store and flat building, 37 by 60 feet; to be erected on South Park avenue and Ray street; pressed brick front, with Bedford stone trimmings; mantels, electric bells and sanitary improvements; cost \$10,000. For B. Webber, two-story basement and attic dwelling, 34 by 40 feet; to be erected at High Ridge; frame, with stone basement; mantels, electric bells, etc.; cost \$5,000.

Architects Treat & Foltz: For Central Steam Laundry Co., six-story laundry building, 40 by 100 feet; to be erected on Monroe and Jefferson streets; St. Louis pressed brick with terra-cotta trimmings; cost \$33,000.

Architect F. B. Townsend: For C. W. Ephricke, three-story store and flat building, 130 by 60 feet; to be erected on Van Buren near Robey street; cost \$30,000. For A. W. Pulver, two-story and attic frame residence; 28 by 48 feet; to be erected on Goodwin avenue; cost \$5,000.

Architect Perley Hale: For M. Schell, two-story flat building, 56 by 66 feet; to be erected on Wabash avenue and Forty-sixth street; cost \$8,000.

Architect W. T. Leshar: For F. Touges, three-story store and flat building, 27 by 56 feet; to be erected on Harrison street, west of Claremont avenue; St. Louis pressed brick with Michigan green and buff sandstone; cost \$8,000.

Architect S. W. Roth: Three-story store and flat building, 24 by 53 feet; to be erected on Lake street, west of Parker Place; St. Louis pressed brick with Michigan green and buff sandstone; cost \$6,500. Three two-story cellar and flat buildings, 23 by 40 feet, to be erected on Walnut street, west of Park Place; cost \$9,000. Two two-story cellar and flat buildings, 24 by 76 feet each; to be erected on Vincennes avenue south of Forty-sixth street; St. Louis pressed brick with brownstone trimmings; cost \$8,000.

Architect M. Brown: Two two-story and cellar flats; 25 by 70 feet each; to be erected on Kenwood avenue south of Forty-sixth street; first story and basement brownstone; second story pressed brick; cost \$11,000.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall.

The fall business so earnestly hoped for by the builders has not reached the desired volume. I think, however, that the aggregate as regards profits, has been or will be

reasonably satisfactory, for while there have been no very extensive buildings or blocks erected, yet the large number of residences carried to completion, have kept the laboring world out of the hands of the de'il. The annual report of Sidney D. Maxwell, Supt. of the Cincinnati Chamber of Commerce, shows the following statistics of the different building branches for the year ending August 31, 1887:

Brick and bricklaying	\$3,077,000
Building materials (exclusive of brick and stone)	4,004,812
Carpentering	3,846,568
Cement, lime and plaster	93,760
Drain pipe and firebrick, etc.	127,800
Galvanized and sheet iron	1,006,000
Glass (stained and ground)	341,378
Hardware	1,162,000
Iron (wrought, railing, etc.)	937,000
Painting	901,406
Roofing materials	351,700
Stair building	162,500
Window shades (Venetian blinds, etc.)	39,200

Although some of the divisions cover a *good deal* of ground, yet the figures are reliable and authoritative, and give a most excellent idea of trade. As a trade statistician, Mr. Maxwell has no superior, and his reports have attained a world-wide reputation for completeness and accuracy.

Architect Thornton Fitzhugh is preparing plans for a Cincinnati Syndicate for twenty or more houses, at Findlay. One of the features of the houses, which are to be of frame, will be the natural gas heating and lighting.

Gustave W. Drach reports a residence for John A. Gano, Esq. He has fully carried out the owner's desire for a plain, comfortable house, containing all the modern improvements, laundry, bath, etc.; cost \$9,000.

A. O. Elzner is taking estimates on additions and alterations for Charles Mendenhall's residence, in Walnut Hills. The first story will be stock brick, the second story frame and plaster. He has certainly utilized his space well; while the exterior is quite picturesque. This residence, when completed, will add to the already beautiful locality.

James W. McLaughlin has prepared a very pretty plan for a residence for Charles A. Parkes, Esq. It is of brick, two stories and a half high, with slate roof. The first floor plan is compact, yet roomy and very convenient; cost about \$8,000.

Messrs. Crapsey & Brown have their time well employed with several plans not yet ready for reporting. Among them is a very neat, two-story, ten-room, brick house for Jno. C. Scheibley. It is a cheap house with a good many home comforts.

Architect S. Godley has plans for a three-story dwelling house, to be for Fred Gear. To be built of brick with stone trimmings, softwood finish, tin roof; it will cost about \$3,500.

Architect Louis Piket has drawn the plans for a fine, yet cheap residence, for Peter Reuhl, Esq. It will be of brick with stone trimmings; contain ten rooms, and cost about \$4,500.

In Mr. Piket's office are his two sons, receiving careful instruction from their father, who, in turn, studied under his father, and they have never disgraced their calling by inferior work.

G. & A. Brink report a brick dwelling for Wm. Duhlmeyer, containing twelve rooms, laundry, bath and closets, with tin roof; cost \$5,000.

For Fred Luecke a two-story brick residence, of ten rooms, pine finish, with tin roof; cost about \$3,500.

Architect E. R. Tischler has prepared the plans for a residence for Mr. George Howell. It will be built of frame, two stories high; contains nine rooms, and all the modern improvements; cost about \$3,000.

Architect G. W. Drach: For T. Hayes, a three-story store and office building, brick with stone trimmings, iron store front, galvanized iron cornice, tin roof, pine finish varnished, mantels, grates, stationary washstands, bathrooms, etc.; cost \$6,500.

Architect T. A. Richter: For Geo. Hagerdon, two-and-a-half-story frame residence, porches, gables and dormers, mantels, grates, etc.; cost \$5,000. For H. H. Nieman (Clifton, Ohio), two-story and attic dwelling, brick with stone trimmings, slate roof, gables, dormers, circular porches, hardwood finish, slate mantels, annunciators, furnace, laundry fixtures, bathroom, etc.; cost \$70,000.

Architect D. S. Schureman: For C. T. Dickson, remodeling and extension to residence, 75 by 100 feet, three stories, brick, frame and stone, tile and shingling, slate roof, hardwood finish, furnace, hot and cold water, bathrooms, laundry, annunciators and first-class modern improvements; cost \$11,000.

Architect E. F. Baude: For A. Zuber, one-and-a-half story store and flat building, brick with stone trimmings, iron store front, white pine finish, iron and wood mantels, galvanized iron cornice, tin roof; cost \$5,500.

Architect W. W. Franklin: For Geo. K. Shoenberger, two two-story and attic frame dwellings, inside and outside blinds, mantels, grates, bathrooms, water-closets, galvanized iron cornice, tin and slate roof; cost \$14,000.

Cleveland, Ohio.—Architect Hardway: For F. W. Smith, two-story frame dwelling; cost \$4,000. For B. L. Reynolds, two-story frame dwelling; cost \$3,000. For I. Reynolds, two-story frame dwelling; cost \$3,500. For G. E. Kelper, frame dwelling; cost \$3,000.

Council Bluffs, Iowa.—Architect M. E. Bell: For I. Gillinsky, two dwellings; cost \$3,000 each.

Architect S. E. Maxon: For A. W. Askwith, two-story residence, 32 by 43 feet; pressed and ornamental brick; galvanized iron cornice, marble wainscoting, slate mantels, marble tiling and stairs, steam heat, stained and plate glass, incandescent lights, gas machine and modern improvements; cost \$6,000.

Denver, Col.—Business is reported to be flourishing with architects and builders. Among the permits issued recently, running from \$3,000 and upward, are the following: C. E. Pinkney, two-story brick building, 23 by 52 feet; cost \$5,200. William Straman, one-story brick, 21 by 40 feet; cost \$8,000. W. S. Babcock, two-story brick building, 27 by 47 feet; cost \$3,500. A. L. Johnson, one-story brick building, 100 by 125 feet; cost \$8,000. J. Sherwin, two-story brick building, 50 by 75 feet; cost \$5,000. J. F. Hall, two-story brick building, 32 by 60 feet; cost \$6,000. Bennett & Myers, two-story double brick dwelling, 46 by 75 feet; cost \$12,500. R. A. Long, two-story, brick dwelling, 30 by 45 feet; cost \$8,000. Mrs. M. A. Paeny, three-story brick building with stone basement, 27 by 55 feet; cost \$5,000. F. Hanigan, two-story stone and brick residence, 27 by 55 feet; cost \$5,000. M. Curtis, two-story brick dwelling with stone basement, 29 by 63 feet; cost \$6,500. William Hartman, three-story with stone basement, dwelling; cost \$5,000. W. Spellman, two-story double brick residence, 45 by 65 feet; cost \$7,000. C. A. Wilson, two-story brick residence, 21 by 46 feet; cost \$5,000. Kessler & Muehlbach, two-story brick double business block, 46 by 50 feet; cost \$6,000. J. M. Ternold, one-story brick business building, 25 by 40 feet; cost \$7,000. W. H. Jones, three two-story frame dwellings, 22 by 40 feet; cost \$5,400. Home Investment Company, three three-story brick business houses, 80 by 46 feet; cost \$12,000. A. W. Lonquist, two-story double brick business block, 40½ by 65 feet; cost \$6,000. Mary Doyle, two-story brick residence, 22 by 50 feet; cost \$3,000. C. A. Wilson, three two-story brick residences, 21 by 46 feet each; cost \$10,500. J. Brumbach, three-story brick residence, 28 by 100 feet; cost \$15,000. H. J. S. Seeler, two-story frame residence, 33 by 36 feet; cost \$3,500. D. T. Beals, remodeling building; cost \$4,000. John Conway, two-story brick residence, 22 by 46 feet; cost \$3,700. J. W. Kidwell, two-story frame residence, 37 by 52 feet; cost \$6,000. S. B. Prevost, one-story frame residence, 22 by 28 feet; cost \$4,200. J. W. Garvey, two-story brick residence, 30 by 52 feet; cost \$5,000. J. F. Marks, two-story brick residence, 80 by 52 feet; cost \$5,000. Conch & Smith, three-story brick business building, 40 by 94 feet; cost \$10,000. T. E. Benning, two-story frame residence, 24 by 104 feet; cost \$3,500. St. John's Church addition, 32½ by 40½; cost \$4,000.

Detroit, Mich.—Business remains about the same as last month—rather quiet with architects. The building permits for the month aggregated \$307,620; new buildings \$280,395; alterations \$27,225.

Architects Mason & Rice: For G. W. Lee, two-story dwelling, 54 by 80 feet; brick with stone trimmings, slate roof; cost \$22,000. For Detroit White Lead Works, one-story brick varnish factory, 60 by 90 feet, gravel roof; cost \$25,000.

Architect H. Englebert: For Methodist Society, chapel building, brick with stone trimmings, slate roof, 36 by 65 feet; cost \$4,000. For Board of Education, two-story school building, brick with stone trimmings, slate roof, 72 by 82 feet; cost \$25,000.

Architects Hess & Roseman: For Mrs. C. Newman, two-story double dwelling; brick with stone trimmings; slate roof; cost \$6,000. For W. G. Brownlee, two-story dwelling; brick with stone trimmings; slate roof; cost \$7,000.

Architects Spier & Rohns: For R. Hall, two-story store building, 44 by 30 feet; brick with stone trimmings; gravel roof; cost \$3,500.

Architect Hugo Bloquette: For M. Houser, two-story dwelling; 26 by 58 feet; brick with stone trimmings; gravel roof; cost \$3,000. For Mrs. Dr. Perrin, five one-story frame dwellings; 24 by 40 feet each; cost \$4,200.

Architect C. J. Talbot: For D. Lane, three two-story dwellings; 59 by 30 feet; brick with stone trimmings; gravel roof; cost \$4,000. For K. T. Ives, two-story dwelling; 35 by 54 feet; brick with stone trimmings; slate roof; cost \$6,000.

Architect M. L. Smith: For T. M. Cattel, four one and two-story frame dwellings; 22 by 40 and 46 feet; cost \$4,500.

Architects Van Leyden & Preston: Remodeling entire interior of Wonderland Theatre and changes to museum; cost \$20,000. All the above under way except Wonderland Theatre, which is just completed.

Architects Scott & Co: For Herman Roehm, two-and-a-half story residence; 32 by 60 feet; brick with stone and terra-cotta trimmings; slate roof; cost \$15,000. For Daniel Scotten & Co., four-story business block; 40 by 75 feet; brick with stone, ornamental brick and terra-cotta trimmings; all modern improvements; cost \$20,000. For R. R. Goodell, three-story residence, 30 by 65 feet; brick with stone and terra-cotta trimmings; slate and tin roof; cost \$15,000.

Architect G. W. Lloyd: For H. Sheldon, remodeling and addition to residence; pressed and ornamental brick; wood mantels, hardwood finish; plate, stained and ornamental glass; steam heat; annunciators; pneumatic bells; laundry, etc.; cost \$4,000.

Dubuque, Iowa.—Architect Beck: For Lutheran Society, four-story school-house; cost \$16,000.

Architects F. Herr & Son: For Rieneks & Sons, three-story soap factory; cost \$10,000.

Duluth, Minn.—Architects Palmer & Hall: For Board of Education, school building; cost \$50,000. Also hotel building, to be erected at Superior, Wis.; cost \$35,000.

Englewood, Ill.—Architect J. H. De Horvath: For School District No. 4, Auburn, Ill., two-story, eight-room schoolhouse, 70 by 85 feet, stone foundation, Tiffany pressed brick; cost \$30,000. For Mrs. E. F. Tilden (Auburn Park), two-story and attic frame residence, slate roof; cost \$8,000. For C. S. Thomson (same place), two-story frame residence, 48 by 56 feet; cost \$10,000. For Home Club House (Normal Park) ball and billiard rooms addition and bowling alley, 34 by 88 feet, frame structure; cost \$4,500. For George & Young (same place), two-story frame residence, 25 by 40 feet; cost \$4,000. For Frank Boden (same place), three-story store, flat and hall building, 56 by 100 feet; cost \$12,000. For George & Young, two-story frame residence building, 26 by 40 feet; cost \$5,500. For George Widdendorf, alteration and addition to two-story frame residence, Michigan greenstone basement, cement first floor, slate second floor, slate roof, steam heating, etc.; cost \$8,000. For Mrs. T. Hughes (Hyde Park), two-story flat building, 25 by 65 feet, Indiana pressed brick with St. Louis ornamental brick trimming, stone basement; cost \$12,000.

Kansas City, Mo.—Business keeps on in the same "booming" way. There appears to be no abatement, and all architects are reported to be doing a "land office business," notwithstanding the advanced state of the season.

Architect L. Levering: For Mrs. Emma Moulton, two-story brick residence, 50 by 130 feet; pressed brick front, with ornamental brick and stone trimmings, American tiling, pneumatic bells, hardwood mantels, hardwood finish, galvanized iron cornices, stone fences and sidewalks, and all modern improvements; cost \$15,000. For Lyon & Cotty, store building and flat, 59 by 85 feet, three stories, pressed brick front, with stone and terra-cotta trimmings, gravel roof, wood mantels, yellow pine finish, plate glass, copper and galvanized iron cornices, fire escapes, etc., and modern improvements; cost \$16,000. For F. L. Wilkinson, three-story business block, 25 by 115 feet, pressed brick front, with stone and terra-cotta trimmings, gravel roof, galvanized iron cornices, yellow pine finish, slate mantels, plate glass, fire escapes, steam heat, annunciators and all modern conveniences; cost \$10,000.

Architect T. J. W. Hart: Block of four three-story residences, 50 by 152 feet, pressed brick front, with stone and ornamental trimmings, galvanized iron cornice, slate and composition roof; oak and poplar finish; plate and cathedral glass, mantels, electric bells, hot air furnaces, laundry fixtures and all modern fixtures and improvements; cost \$60,000.

Architect A. Van Brunt: For Dobbson & Douglas, remodeling block of dwellings, pressed brick, stone and iron fronts, plate glass, etc.; cost \$12,000. For W. B. Bright, cottage, Warrenburg stone, hardwood finish, steam heat, mantels, bathrooms, grates, etc.; cost \$10,000.

Among the building permits issued during the past month, contemplating an expenditure of \$5,000 and upwards, are the following: W. Spellman, two-story double brick residence, 45 by 65 feet; cost \$7,000. C. A. Wilson, two-story brick residence, 21 by 46 feet; cost \$5,000. Kessler & Muehlbach, two-story double brick business house, 46 by 50 feet; cost \$6,000. W. H. Jones, three two-story frame residences, 22 by 40 feet each; cost \$5,400. Home Investment Company, three-story business house, 80 by 46 feet; cost \$12,000. A. W. Lonquist, two-story double brick business house, 40½ by 65 feet; cost \$6,000. C. A. Wilson, three two-story brick residences, 21 by 46 feet each; cost \$10,500. J. Brumbach, three-story brick residence, 28 by 100 feet; cost \$15,000. J. W. Kidwell, two-story frame residence, 37 by 52 feet; cost \$6,000. J. W. Garvey, two-story brick residence, 30 by 52 feet; cost \$5,000. J. F. Marks, two-story brick residence, 80 by 52 feet; cost \$5,000. Conch & Smith, three-story brick business house, 40 by 94 feet; cost \$10,000. Mrs. L. C. Donnelly, three-story business house; cost \$9,200. Leonard Daniels, six two-story brick business houses, 127 by 48 feet; cost \$22,000. O. B. Gunn, three-story double brick building, 41 by 70 feet; cost \$13,000. J. B. Jackson, three two-story frame business houses, 50 by 50 feet each; cost \$6,000. R. M. Snyder, two three-story brick residences, 22 by 42 feet each; cost \$18,000. M. Vandever, two two-story brick residences, 22 by 59 feet each; cost \$8,000. E. W. Haynes, three two-story brick residences, 62½ by 34 each; cost \$7,000. For same, two two-story brick residences, 24 by 36 feet each; cost \$8,000. C. E. Blackmar, three two-story frame residences, 20 by 40 feet each; cost \$5,400. A. L. Mason, two four-story brick and stone business houses, 49½ by 112 feet each; cost \$100,000. E. T. Pierce, four two-story brick residences, 21 by 44 feet each; cost \$12,000. Belt Planing Company, two-story planing mill, 48 by 96 feet; cost \$5,000. H. L. Clark, two-story frame residence, 23 by 42 feet; cost \$4,000. J. F. Corle, three-story brick residence, 20 by 40 feet; cost \$6,000. G. M. Banfield, two-story brick residence, 22 by 58 feet; cost \$5,000. G. Pinkston, two-story brick residence, 43 by 50 feet; cost \$4,800. W. E. Robbins, two-story frame residence, 18 by 34 feet; cost \$3,600. Clark & Street, two-story frame residence, 22 by 45 feet; cost \$8,000.

Madison, Neb.—Architects Spaulding & Junge: For Dow & Son, five-story mill, 60 by 90 feet; cost \$8,500. For same parties, dwelling; cost \$3,500.

Milwaukee, Wis.—Architects E. B. Koch & Co.: For Mrs. Howard, two-story residence, 86 by 66 feet; brick with stone trimmings; cost \$6,500. For Milwaukee Board of Underwriters, two-story building, 30 by 100 feet, brick; cost \$5,000.

Minneapolis, Minn.—Architects Long & Kees: For S. T. Cook, addition to the Lumber Exchange, 100 by 140 feet, twelve stories high; brick and stone construction; galvanized iron work, composition roof, iron beams, wirework, burglar and fire-proof vaults, prismatic sidewalks, marble wainscoting, tiling and stairs; plate glass, steam heat, pneumatic bells, elevators and dumb waiters, etc.; cost \$65,000. For A. A. Pond, five-story office building, 80 by 25 feet, St. Louis pressed brick, with brownstone trimmings, iron beams, galvanized iron cornice, composition roof, steam heat, oak finish, plate and stained glass, boiler and engine, freight elevator and modern conveniences; cost \$16,000.

The following are among the recent permits for buildings to cost \$5,000 and over: C. Engel, residence; cost \$6,000. J. C. Roberts, three stone veneered residences; cost \$39,000. C. W. McGregor, two two-story dwellings; cost \$7,100. J. H. Edmunds, two-story frame dwelling; cost \$5,000. J. Brader, two brick veneered dwellings; cost \$7,500. L. Darrow & Co., one-story brick and stone carriage depository; cost \$16,000. C. H. Chadwick, nine two-story frame dwellings; cost \$9,000.

Omaha, Neb.—A four-story edition will be built to the Creighton College building; cost \$20,000. The Omaha Charity Association proposes to erect a \$9,000 building.

Phillipsburg, Kan.—A large hotel building is to be erected by Messrs Hahnkrodt & Bissell, to cost \$10,000.

Sau Antonio, Tex.—The building outlook is good and promising. Considerable building has been already done, and there are no signs of abatement.

Architect Alfred Giles reports the following: For Wm. Vance, two-story building, 114 by 87 feet, brick walls, rock foundation, cutstone and brick front, gravel roof; cost \$16,000. For Jacob Waelder, one story and basement dwelling, 78 by 60 feet, stone and brick, cutstone and brick front, gravel roof; cost \$8,000. For Joske Brothers, two-story building, 68 by 180 feet, rock and pressed brick, gravel roof; cost \$35,000. Brick addition to St. Charles Hotel, Kerrville; cost \$12,000. Addition to court house, Gillespie county; cost \$5,000. For C. Schreiner (Kerrville), addition to warehouse; cost

\$2,000. For William Bierschwald (Fredericksburg), rock residence, 40 by 60 feet, tin roof; cost \$3,500. For C. Ogden, residence, 60 by 76 feet, brick and stone, tin roof; cost \$8,000. For J. Dignowith, residence, brick and stone; cost \$6,000.

Sioux City, Iowa.—Plans have been prepared for the remodeling and erecting a three-story addition to the Unitarian Church; cost \$10,000.

St. Joseph, Mo.—The Chicago, St. Paul & K. C. R. R. Co., will erect large passenger and freight depots.

St. Paul, Minn.—Architect J. H. Coxhead: For S. Mayall, large store building, five stories, St. Louis pressed brick, with Bayfield stone trimmings, slow-burning construction, steam heat, elevators, etc.; cost \$20,000.

Architect Geo. Bergmann: For H. Mollers, store and office building, two stories, 64 by 50 feet, pressed brick front, with stone trimmings, galvanized iron cornice, iron beams, skylights, tin roof, plate glass, and modern improvements; cost \$12,000. For Geo. L. Leyh, store and flat building, two stories, 38 by 50 feet, brick, with stone trimmings, steam heat, hardwood finish, plate and ornamental glass, electric lights, store

fixtures, refrigerators, etc.; cost \$7,000. For F. W. Stephenson, two-story frame residence building, 24 by 38 feet, electric lights, stained and plate glass, steam heat, laundry fixtures, etc.; cost \$6,000.

Architect C. B. Seaton: For S. H. Piatt, frame residence, to be erected at Marion Park, modern improvements; cost \$5,000.

Architect J. M. Dougherty, four-story store and apartment building, 100 by 119 feet, brick, with stone trimmings, steam heat, hardwood finish, plate and stained glass, electric bells, etc.; cost \$72,000.

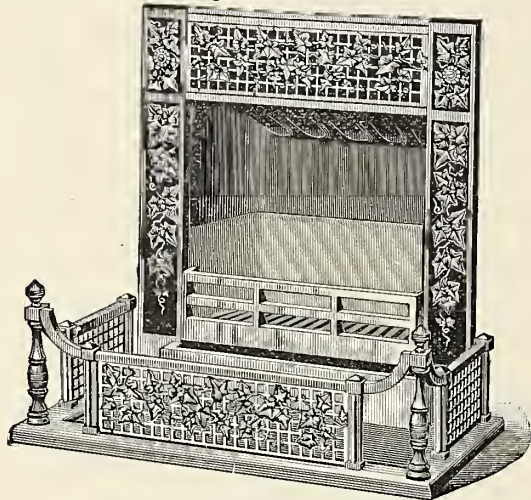
Topeka, Kan.—Architect J. G. Haskell: For a two-story bank building, to be erected at Seneca, Nebraska. It will be two stories high, with an area of 25 by 75 feet; cost \$10,000. For T. B. Thatcher, three-story store and office building, 50 by 100 feet, brick with stone trimmings; cost \$18,000.

Mrs. Cleyston will erect a fine residence; cost \$7,000. S. M. Crow has the plans and will erect a three-story business block; cost \$10,000. Mrs. M. Short will erect a two-story double flat building; cost 6,000. The Oakland M. E. Church Society will erect a fine church edifice.

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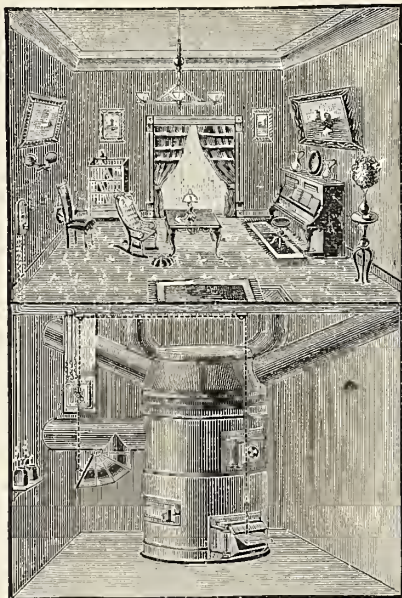
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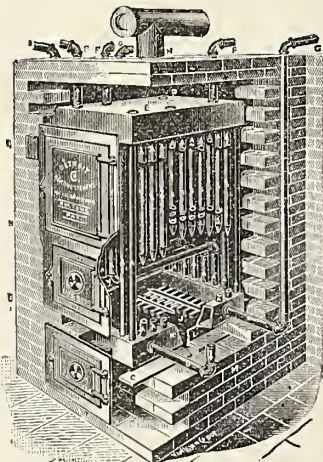
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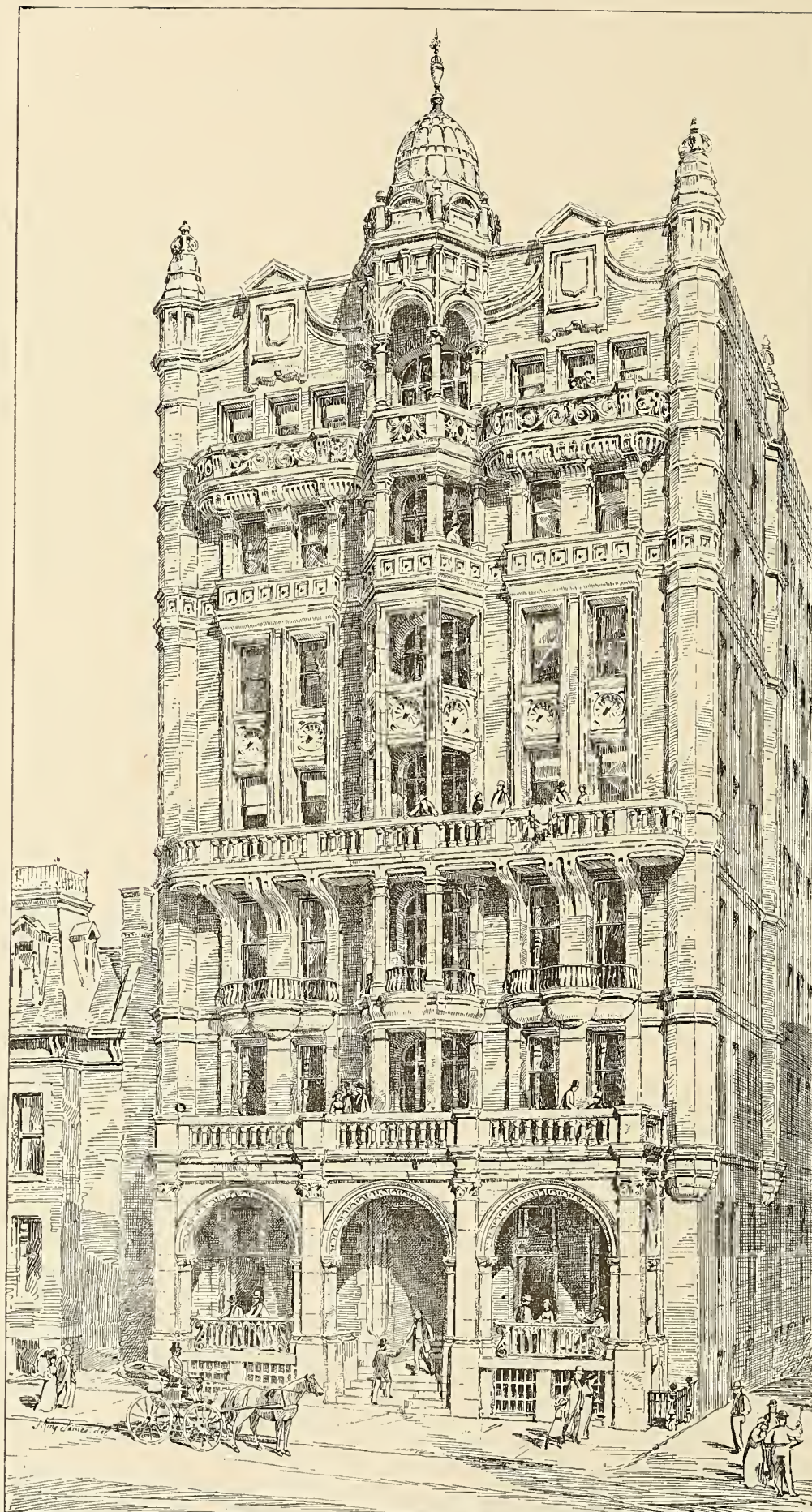
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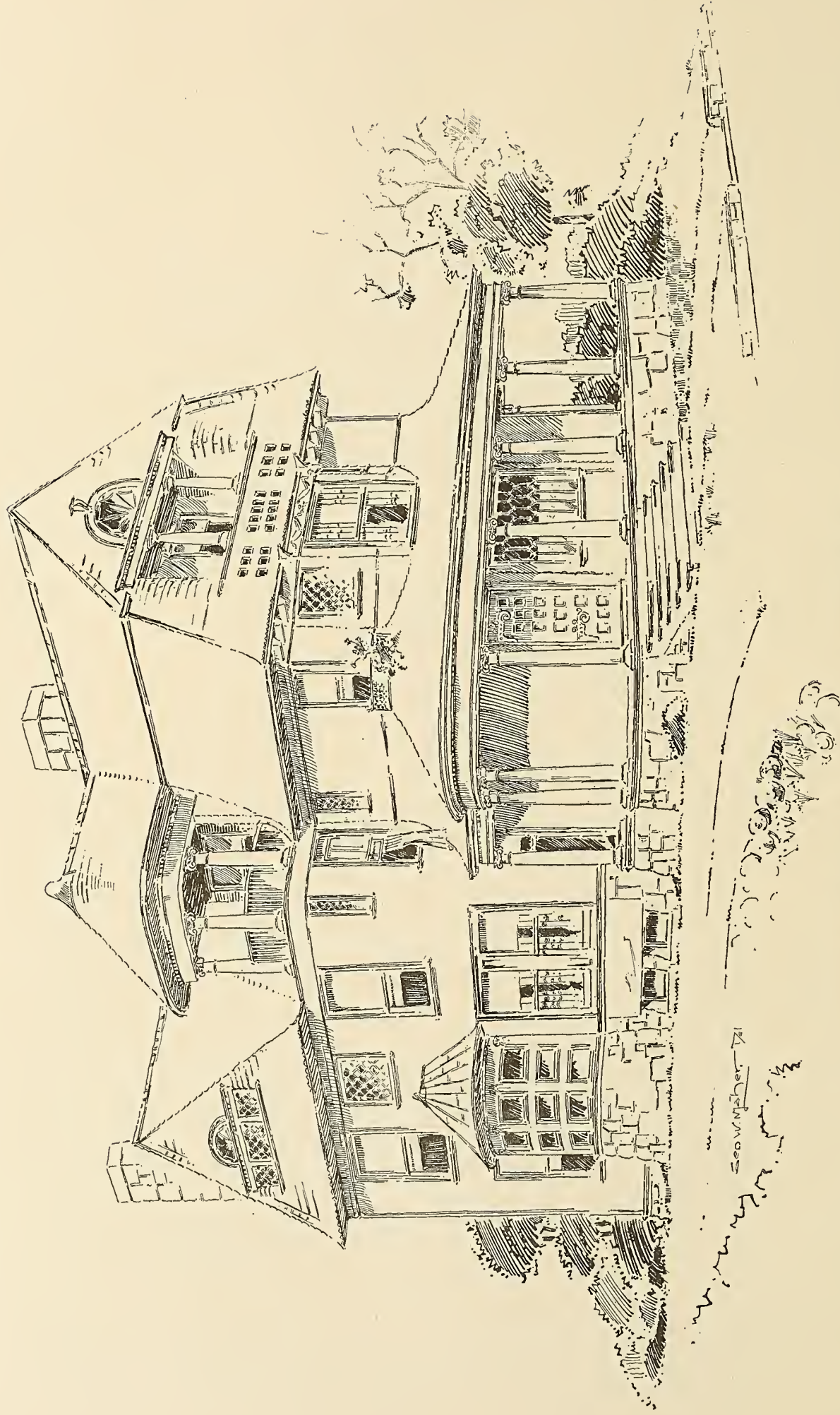
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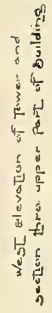
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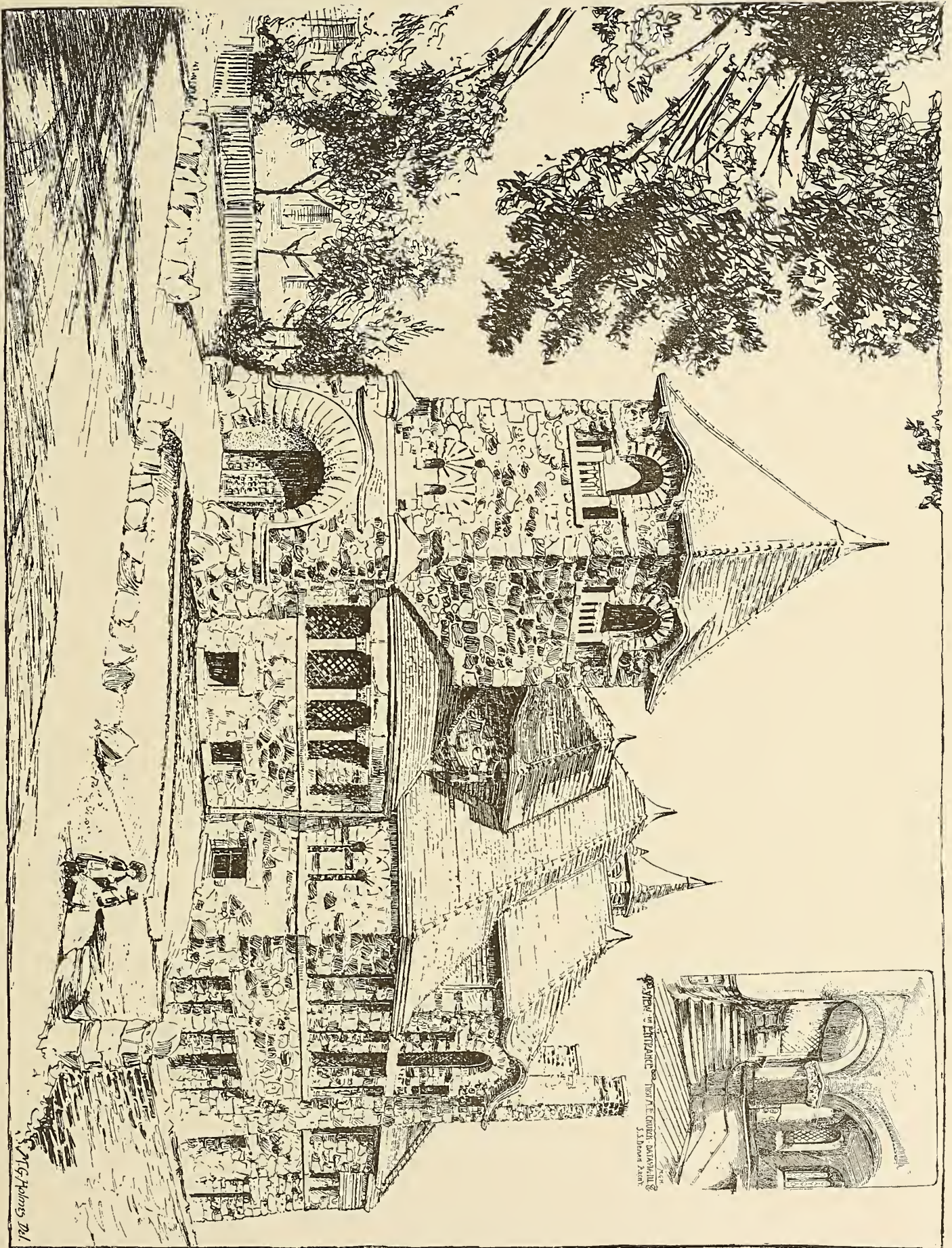


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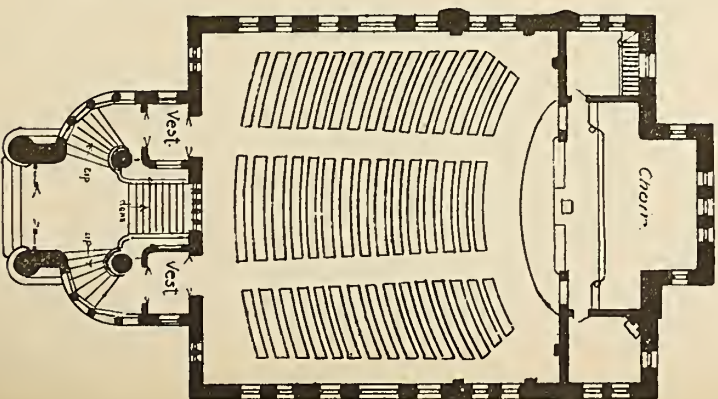
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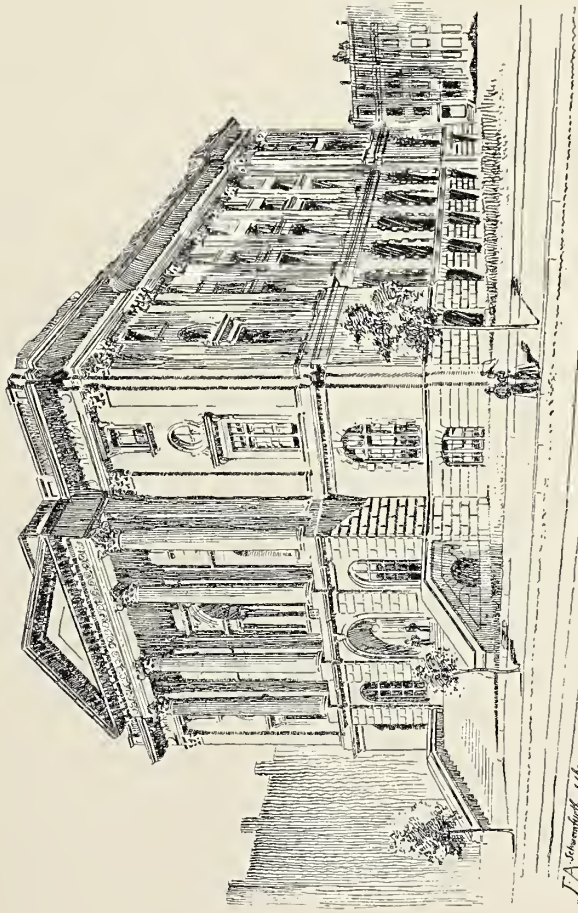


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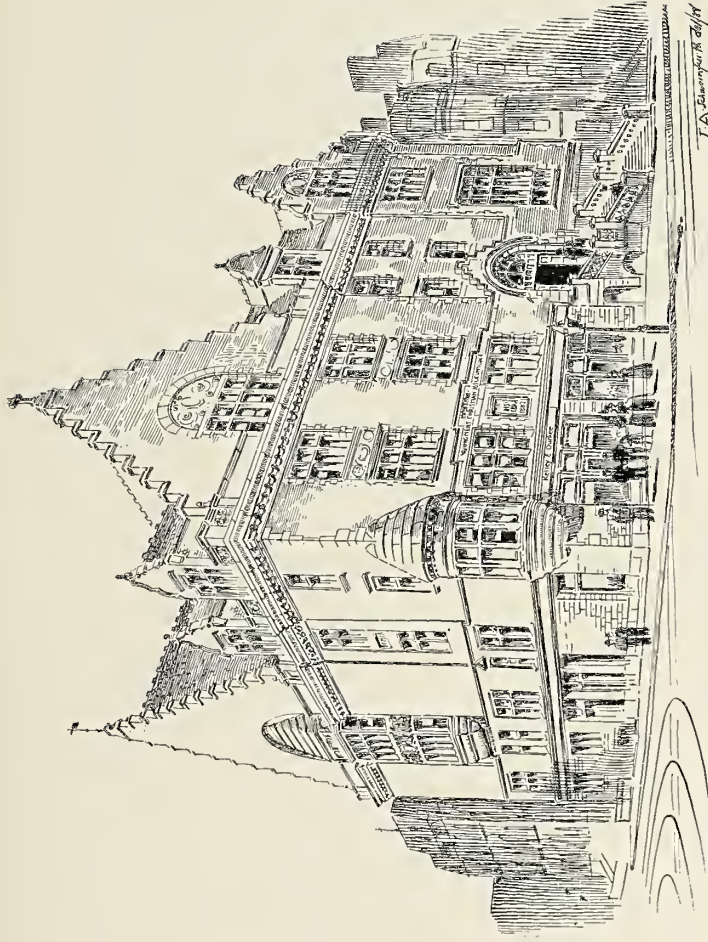
Dining Room Interior
Residence on Michigan Ave. Chicago.
W. J. J. Tenney & W. A. Otis Architects
1888



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*Mass. Inst. Technology
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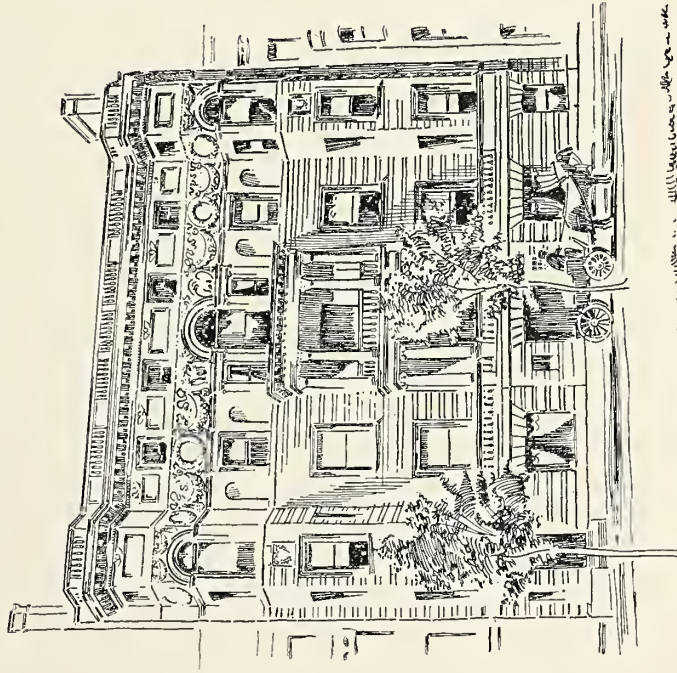
Jonathan Eaton, Archt.



*Young Men's Christian Association Bldg.
Boston and Chelsea, Mass.*

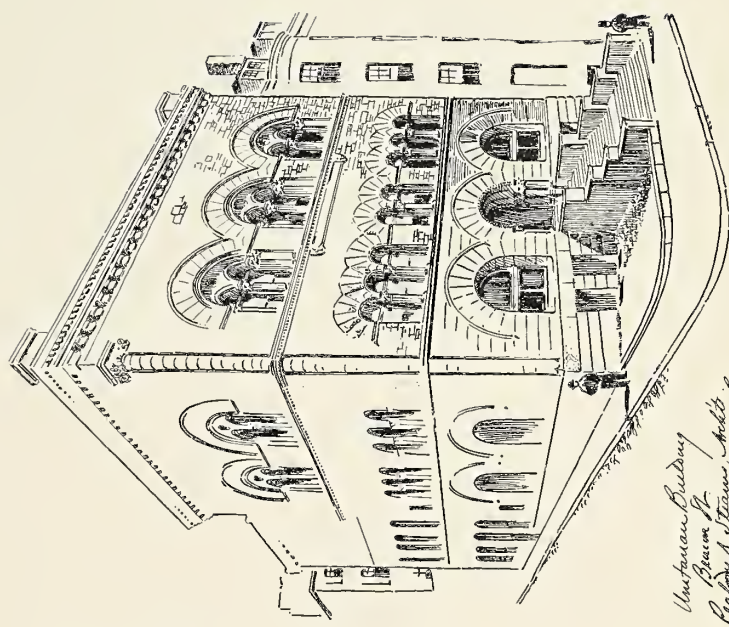
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VOL. XII.—No. 4.

CHICAGO, OCTOBER, 1888.

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INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

Special Notice.

THE fifth annual convention of the Western Association of Architects will be held in Chicago on November 21, the third Wednesday in the month. Special attention is called to the date, as the date before published was incorrect.

An exhibit of drawings will be a feature of the convention, and though the official announcement has not yet been made, architects should immediately make preparations to send perspectives, photographs, etc., of their executed work. The publishers of THE INLAND ARCHITECT have established a department for the execution of line and watercolor perspectives.

AT a meeting of the Board of Directors of the Western Association which was held in Chicago, October 23, a general outline of a report to the convention was made. A general committee on rooms and entertainment was appointed. There were present: John W. Root, Samuel A. Treat and J. J. Flanders, of Chicago; George B. Ferry, of Milwaukee, Wis., and J. F. Alexander, of La Fayette, Ind. The board agreed to recommend the election in a body of the members of the Western New York State Association of Architects under the old rule of the association because of the unusually high character of the architects composing that association. The board will also suggest that a permanent place of meeting for the association be determined upon; that the term of office of secretary be made three years, and that blank certificates of membership, to be filled out annually, be issued. The board will also call attention to the fact that the most important matter to be discussed is the question of consolidation of all architectural societies and advise a conservative course in regard to new measures until this is decided. The general committee on rooms and entertainment will consist of John

W. Root, J. J. Flanders and Samuel A. Treat. An effort will be made by them to secure a convention hall in the hotel which may be selected for the headquarters of the members. Full particulars will be published, as far as completed, in our regular edition for November.

THE meeting of the Western New York State Association of Architects, on October 16, was a remarkable one in the history of state associations. Out of a total membership of fifty, but eleven were absent from the convention, and the personnel of the members was such as to strongly impress the members of the American Institute with the important character of the state organizations formed under the Western Association. The first year's work of this state association has been phenomenally complete, and the recognition of the high character attained by the association by the Board of Directors of the Western Association in recommending them to acceptance to membership in a body is a legitimate reward.

THE twenty-second annual convention of the American Institute of Architects at Buffalo, October 17, 18 and 19, was marked by able reports by committees and prompt and incisive discussion by the members. In our haste to get the proceedings of this meeting before the architects of the country we cannot give the calm consideration necessary in expressing opinion upon the weighty questions discussed. This will be left to a future number; but each architect, especially those who belong to the Western Association or any of the state associations, should read the proceedings carefully. Attention is particularly directed to the discussion of the report of the committee upon consolidation. It is given in full for this purpose, and after reading, each member should decide to let no business, however important, keep him from attending the Western Association convention on November 21. A word of commendation should be spoken in regard to the admirable way in which the Buffalo architects arranged for and carried out the reception and entertainment of the Institute. While all did their part in contributing to this end, it is but justice to mention the name of W. W. Carlin in this connection as the prime mover and most energetic worker in all the arrangements. His practice is large and his private interests many, but these were all made subordinate to the desire that the meeting of his state association and that of the Institute should be in every way a pleasure and benefit to those attending.

Observations on Heavy Buildings.*

BY R. W. GIBSON, ARCHITECT, NEW YORK.

WHAT is a heavy building? It is certainly no new thing. The world is dotted with them so freely that in abundance of human interest they rival the works of nature. But architecture changes as times change. Each age has its character, which is recorded in its buildings more inevitably and more permanently than in anything else. The ambitious efforts of the eras of military conquest and the monumental expressions of those of religious enthusiasm, are written clearly in the wrought stone of the old edifices which are our inheritance. And these are not undervalued. We still experience the same emotions and passions, and express them, more or less ably, in the same materials. We still build towers and cathedrals and tombs. And all these might come, in a general way, under the title of this paper.

But there is now a new order of things. This is the epoch of industrial enterprise. Let us consider for a little time this newer work we are doing. We are not in the habit of looking far into the past for guidance in the scientific department of our labors, however often we may grope there for artistic inspiration. And this is because most of what we do is new. The architects of ancient times have raised thousands of tons of marble in majestic beauty; that was their aim and object in building, and all else was subordinated to it. We are called upon to deal with equal or greater structures; with certain additional demands of utility and economy, which would have rendered the task impossible to masters of olden times. The stately buildings of this class, which tower over the streets of our modern cities, are loaded with tier upon tier of spacious chambers; they are permeated with countless flues and ducts and wires, and made alive with machinery vibrating with enormous power. And with all this, the walls upon which they are upheld must be pierced with innumerable windows and doors, so that the light of day and swarms of busy workers or luxurious residents and their attendants, may have free access, even to the basements and cellars. These tiers of floors must often support enormous loads of merchandise or machinery, or of human beings. And lastly, the structural materials must be not only incombustible but, as far as possible, fireproof.

Under these conditions we find that our work is, in truth, of a new order of things. And in that new order ideas develop rapidly. The most daring conceptions of one generation become the commonplace thoughts of the next. Accumulated experience reduces to method all those theories which are found worthy of it, by the tests of practice. And the quicker we can evolve these methods and formulate their rules, the easier our progress and the freer our course to the next stage, wherein new problems await us. Therefore, one of the tendencies brought about by the need for these heavy buildings is toward mutual assistance, a careful observation of what others are doing.

There is undoubtedly too little attention given to the process which may be called the analysis of contemporary art. In the earnestness of individual work there is too much isolation and independence. The man who discovers says nothing of his thought, and each one of us explores and re-discovers the same truth. And, indeed, there is a harmful impression that the rule of originality should be interpreted to debar the adoption and repetition, even of a good principle, so that what is done in this direction is to some extent disguised and apologized for. It was not thus that the old-time heroes in our craft worked. From the time of the pyramids down to that of Renaissance, the schools were more evident than the individuals; and whether by master or pupil, the work shows subordination to accepted codes. From these undisputed principles individual labors toward perfection commenced, at a stage higher than that at which many now terminate.

It was by this collective knowledge the Greeks carried refinement of detail to its height. And (to go from one extreme example to another) it is by the power of the same method—the acceptance and adoption of certain unoriginal but established types—that the designers and builders of the least educated class among us are enabled to erect fairly satisfactory structures of many storied and complex arrangements, such as the cheaper flat and tenement buildings of New York City. We will not overlook the imperfections of these buildings, nor will we mention them as worthy of imitation, but they do teach the lesson of coöperation and collective experience which enables work to be done by men, not one of whom independently and originally would be competent to do it. The diversified character of buildings of the higher order may lessen the opportunity for this evolution of their design, but it does not preclude it. There is enough of it evident to show the need of more. Much has been said and written of late, especially in Europe, about a modern style of architecture. The nearest approach to it is without doubt shown in modern American business buildings, and if the best specimens by the acknowledged leaders in our art are compared, it will be seen that sometimes unconsciously, even unwillingly, they follow more or less perfectly the same methods. Heavy buildings of this class promise to compel by their limitations uniformity of design which almost amounts to a style. In order to discover the laws of this style, let us then examine practically the circumstances in which they originate. Scientific design proceeds upon past experience by continuing or adopting successful features and avoiding known faults. What, then, are the successes and faults in recent heavy buildings? It is understood that fireproof buildings of many stories are more particularly referred to.

Despite all that has been learned and written upon the subject, the great difficulty of unequal settlement is the chief cause of faults. I speak of the settlement by compression of the soil upon which a building stands. It is a curious fact that much of the most valuable and densely covered building land in the world is notoriously bad. Many of the heaviest buildings stand on soft, yielding soil. The lower part of New York, with quicksands, silt and mud; Boston, with its districts of made ground where tidal water used to ebb and flow; Chicago, with its lake shore alluvium and

wet sand, all furnish examples of this. Among older sites Pisa, whose leaning tower has puzzled so many dilettanti into fanciful fiction, and Venice and Antwerp and London may be mentioned, the last including large areas of the blue clay of the Thames basin. The commercial origin of their prosperity accounts for it. Where the ships came the cities grew, and there the architects were set to work. Sometimes other causes prevailed; as for example at Albany, where the New York State Capitol stands upon a hill of clay. But this same clay, when it lies with its natural stratification unbroken, is, in the writer's experience, found to be a better soil than is generally supposed.

But let us not linger upon subjects already extensively discussed. These compressible soils, it is well known, must be built upon with equalized loads. The law may be accepted as established, that each square foot of base of pier and wall must bear with an equal pressure in order to secure an equal settlement. But we may still look around us and see faults which this doctrine was to banish. This subject was chosen because of the discovery by the writer, in a series of examinations of modern buildings, of the fact that unequal settlements abound. And here are some of the reasons: We calculate the load upon our girders, columns, walls and piers, and we say, for an example, column C in a ten-story building has a base, bearing three tons per superficial foot, and wall W X a base expanded to give the same pressure. Wall W X we will assume to be a side wall, in a building not on a corner. The structure is finished and occupied, and the wall W X slowly and irresistibly takes its half inch, or inch, or more, of settlement, squeezing down the soft soil despite all preliminary ramming or other preparation. This we expected. But why are the floor levels disturbed, and why those little cracks in the front lintels and sills, if all has settled together? It is somewhat disappointing to look about and see how many sills and lintels betray this fault of unequal settlement, by a crack close to one end—just the bearing end broken off. Inside the building the columns in several places appear to have lifted. It has been argued that the brick and mortar was compressed in its numerous joints, while the iron of necessity is not perceptibly changed. This is true, but not to the extent now in question. Let us look at our calculations again. The wall is all right. So many feet, so many tons. The columns so many feet of iron, so many feet of floor, weighing, perhaps, 70 lbs. per foot—so many feet of floor loads at 150 lbs. per foot—here we have the error. We may say it is not an error, but anything is an error which produces bad results unexpectedly. The floor loads are not there. The mason work is on the wall base in actual fact. But the load of 150 lbs. per foot is on the floors only in theory, and the column foundation which we assume to support, say 360 tons, has actually only 180 tons. What wonder that there is trouble. And the front—where the girder ends rest upon the front piers, as they usually should do, the same thing occurs in a lesser degree. There is a larger proportion of mason work in the calculated load, and only one girder instead of two, but the difference here even, amounts to, perhaps, 100 tons. What can be done? Custom based upon knowledge requires that each floor shall be equal to a safe load of 150 lbs. per foot. In New York City the law requires this for a fireproof office building, and further, that the columns shall be safely equal to the total of all the floors upon them at the same rate. This would seem to be unnecessary in many cases. In each floor an excessive strength is demanded to guard against contingencies, such as the movement of heavy safes or the possible use of some floors for storage. But on all the floors together, a fair average is permissible, because the average is always naturally maintained by reason of the number and variety of the different stories. The columns we may, however, accept in compliance with the laws and customs. The excess is not harmful. But in the foundations we have seen that is positively injurious. The laws, recognizing the impossibility of the task, usually leave the arrangement of this part to be done according to circumstance, except that they stipulate a minimum, applicable to good soil, which does not approach the necessities of the case under consideration.

The foundation of columns should be equalized with those of walls, upon a basis of liberal, but not excessive, average of floor loads, say 50 or 60 lbs. per foot besides the weight of the floor material. This could not possibly be surpassed in an office or apartment building. It is the weight of a crowded seated audience on every floor at once. It is an allowance of 10 or 12 tons of load in an office or apartment, 22 by 18 feet. If some floors could possibly be loaded more heavily others would certainly carry less. Let us work according to these facts and while we may still expect a few cracked ends of lintels the difficulty will assuredly be lessened. It is, therefore, evident that while excessive strength is a harmless precaution in the actual structure, yet a true calculation is necessary for foundation areas.

Next let us give some further attention to the front. There is a natural set of dimensions, arising from limitations and requirements, in these buildings which leads us all far sometimes, in similar paths. The stories (excepting the first) are usually required about 11 or 12 feet high. The girders, 15 or 16 feet apart, in order to use convenient spans of beams and floor arches, and the limits of the bearing of girders will be naturally 20 to 24 feet. If the building is so wide as to demand columns the girders will preferably be placed running from front to rear, because first, the side walls and foundations, with few or no openings, are in themselves extremely heavy; while the front and rear walls with numerous windows, are lighter; and secondly, because the homogeneous side wall is more adapted to receive the distributed floor beams, while the front and rear walls, already divided into piers and openings, are better fitted for fewer concentrated weights. The windows will be required about four or five feet wide, with piers of three or four feet between or perhaps the openings rather less and the piers or walls more, according to the purpose of the building. This agrees very well with our spacing of girders except that two windows come to each division. And here we have the motive for the design of three-fourths of our modern heavy buildings. The two windows are combined and the pier carrying the girder increased, while the other is lessened. The heavy construction, of course, compels openings to be placed in perpendicular lines, except in the uppermost stories. So far so good, but now arises another difficulty which has been abundantly

*A paper read at the twenty-second annual convention of the American Institute of Architects, at Buffalo, October 18, 1888.

studied. The intermediate pier is often carried up from the same foundation (usually continuous under such a front) which carries the main piers. These latter with their enormous loads, perhaps 400 tons each, compress the soil calculated, but the foundation, laid continuous, does not remain so. The part loaded goes down, the part under the windows remains where it was placed and the intermediate columns, whose comparatively little weight rests upon it, do as it does, all the way up, the front is slightly distorted and lintels are cracked. When the writer first began these observations, the cracks in the lintels were rather puzzling. There seemed to be in many cases no apparent cause. The fact is it takes very little unevenness to produce a crack. The force is irresistible and the lintel is a small stone. A good precaution is to give it only so much bearing as is necessary, so that there is less of the end held in the vice-like grip; with stone resting on stone three inches is enough, and many bands, sills, lintels, etc., have 8 or 9 inches running into the pier. If the building is thus more flexible it will not show these movements at such a trifling stage. But let us go to the root of the evil. Shall we hold down that lighter portion of the continuous foundation and compel it to go all together? And if so, how? The inverted arch is the first thing likely to be called for. It is a doubtful aid for this purpose. If used it should be of ample rise, or rather drop, and a pointed or Gothic form would be best. In a wall with a good depth of masonry below it, the arch is no doubt good. It does not take the whole load of its span. But down actually at the bottom next to the concrete, an inverted arch must be loaded with about $2\frac{1}{2}$ tons to the superficial foot of base. Think of this enormous load. Turn the arch the other way up and think of it. It is, perhaps, 6 feet wide, the base is perhaps 10. That makes it loaded with 24 tons per foot of length if considered as a bridge. The thrust is enormous. Imagine the girder necessary to do this work. If it does not do this work it will not compress the soil as we demand of it. Suppose we lessen the load by reducing the width. Practically this almost amounts to giving up the continuity of the base crown. This will be sometimes a gain, especially if the piers are far apart. Or the great piers may have side footings which meet at the foot of the small ones on the base course; those on the other faces being proportionately less. Then if the great piers are equalized the small ones will be carried down by them. But a flat inverted arch will do more good than the slab of concrete or the base course of granite. Brick work and concrete must be considered as possessing no transverse or beam strength under these loads. They will resist pressure, and will spread it at an angle of about 25 degrees from the perpendicular, no more. And the batter of the offsets, or the cord of each half invert, should be at about this angle. There are granite bases to be seen whose offsets equal their height in which an apparent tilt upward has resulted from the failure of the masonry to carry the pressure out at so great an angle.

But the true way to make our light intermediate piers go down with the heavy main ones, is to build them upon girders or arches resting upon the latter. Then even if the great piers differ in settlement, the smaller will maintain their proper intermediate position. It has been assumed that a front entirely of masonry was in question. This is undoubtedly a higher grade of architecture than that in which iron is freely used. Sometimes we see the main piers of mason work carried up with the intermediate piers and other parts entirely of iron, each floor carrying its own tier. This is good in the main, but it misses many of the best opportunities for design, and is of necessity monotonous. Sometimes the iron features are grouped two or three stories together under the arches of masonry. This is better; the stone construction is more complete, and the iron subordinated to it. And other things being equal the use of masonry throughout will undoubtedly produce the greatest dignity of effect. Now we have reached the point in the argument where æsthetic ideas are invited to take their place. Here are encountered the facts, upon which it is submitted the modern style is founded. Yet the constructive and the artistic are, as they should be, so closely linked, that we must not attempt to consider them apart. We have traced the development of the achievement of an equal foundation; now for the superstructure. The superintendent of the New York building department once said (if the veracity of a New York reporter may be trusted), "that the commonest error in construction, was that of making columns and piers too big above, and too small below." He referred, no doubt, to the class of designers before alluded to, whose skill is perceptible only when collected into a sort of joint stock of that commodity. But the same charge, in a lesser degree, could be made against some buildings of the first class. An intermediate column, or pier, supports the lintels and the sills of the next story above, and then comes another similar column, and so on to the top. This is all very well for two or three stories, because the smallest desirable column will be competent to that extent, and because the uniform size of windows suggests equal columns, but if six or eight tiers are so raised, it becomes questionable and monotonous. The single girder, too, has to be made very strong to avoid perceptible deflection, as it is loaded in the center. To meet this objection another improvement is developed. The two or three stories, for which the superimposed columns are proper, are so designed, and then a new girder is introduced, with, perhaps, for variety's sake, one story entirely open, immediately under it, and the intermediate columns again above. In this way we get the numerous tiers of floors and windows reduced to groups. Now we all know how certain critics of the last generation have protested against the grouping of stories, as in the Palladian style, condemning it as untruthful and unconstructive. Yet there has been an instinctive reluctance to abandon it, and we may be assured that any persistent instinctive feeling of this kind is based upon some reason, although that reason may not be readily discoverable. In our modern construction, carried to a high degree in the differentiation of parts, we find these reasons which were not evident in lesser works. Another piece of construction, called false by some critics, is reached here too. That is, the use of an arch, or stone lintel, at certain levels, with a girder behind it or over it, which it is said does all the work. It is true the girder does the work of sustaining the load, and as a tension member, to tie the piers supporting it. But the arch has its duty also. It is a most effective means of holding the piers apart, resisting any tendency which they may develop

to close inward, and as it carries no weight but its own its thrust is abundantly met by the ties and the mass of the piers, and an equilibrium of great strength is maintained. And for this same stiffening effect, as well as for æsthetic reasons, a story may be introduced in one or more places which deals with the front as a whole, not as piers and lintels, but as a wall of the full thickness with openings through it. Pleasing contracts may be obtained by dividing certain sections into three windows instead of two, and this without any imperfection in structure. The skyline is sometimes broken by gables or dormers, and sometimes as severely horizontal as a Roman might have designed. Either method is permissible, and the authors of this style are not afraid to use the simpler motive when circumstances require. Then the lack of light where it is most needed, namely, on the ground story, often prompts the placing of the first main arch or lintel over this or even over the second floor instead of the foundation. Lastly, the monotony of the equal stories is varied by collecting them in unequal groups. Thus we arrive at the fully developed phase of a most simple and dignified composition, for the front of a modern heavy building of the commercial class—which is, to sum up—a façade of many stories divided horizontally into a few main groups. These are contrasted in proportions by including one, two or three floors. The vertical elements are widely spaced, continuous main piers, forming openings subdivided by small piers discontinuously, in the different groups.

This analysis of some of the motives of modern design and the construction from which it arises, reveals the close relationship of all the best work of this class, however varied in treatment of detail. Its truths are alike expressed in the Romanesque work, which is so fast growing in favor throughout the country; in the scholarly Renaissance of New York, and in the more free arches of Chicago. The principles are the same, and the necessities; and the solutions of the problem, by different heads and hands, have that in common which constitutes a new school of architecture, and which, with the prevalent able, strong treatment of the noble, round arch, promises to establish a national style. Already it is begun, and we have a right to expect more of the future than we have received of the present.

Memoir of Thomas Ustick Walter, A.M., Ph.D., LL.D., F.A.I.A.*

BY GEORGE C. MASON, JR., F.A.I.A.

THOMAS USTICK WALTER, second president of the American Institute of Architects, was born in the city of Philadelphia, September 4, 1804, and died in the same city, October 30, 1887, being, at the time of his decease, the oldest practicing architect in the United States.

He was the son of Joseph S. Walter and of Deborah, his wife, and was named after the Rev. Thomas Ustick, a well-known divine during the early years of the present century.

In boyhood, Mr. Walter displayed a predilection for mathematics. His education was liberal, but not scholastic. In 1819, being then fifteen years of age, he entered the office of William Strickland, the architect of the custom house, the mint, the merchants' exchange and marine asylum, and other buildings in Philadelphia, and of the state capitol of Tennessee, in Nashville, within which structure he is buried under a suitable monument. From his own writings, it is learned that Mr. Walter remained with Strickland until he had acquired the art of linear drawing, and a general knowledge of the profession of architecture, after which he resumed his general studies, and went through an elaborate course of mathematics. During seven years he devoted himself to the study of physical sciences, to the cultivation of the arts of drawing and painting, and to the attainment of practical knowledge of the several branches of mechanical construction, while at the same time, in his moments of leisure, he studied landscape painting in water colors, under the direction of Wm. Mason, a celebrated teacher of that art in Philadelphia.

In 1828 he again entered Mr. Strickland's office, devoting himself exclusively to architectural study, the practice of which he commenced in 1830, and in the following year designed the Philadelphia county prison, which was his first important work, his plan for same having been adopted and the construction of the work intrusted to his care.

In the year 1829 he was elected a member of the Franklin Institute of Pennsylvania, and subsequently was elected one of its board of managers, and in 1846 was chairman of the board. Mr. Walter's interest in the Franklin Institute was manifest from the first, and he entered heartily into its councils and discussions. At this early date the public taste for correct architecture was wholly undeveloped, but he worked and argued for the advancement of his art. This enthusiasm bore fruit, and in 1835 it was voted "that a course of lectures on architecture, delivered annually before this society, is indispensable, as well to accomplish the ends as to promote the prosperity of the Franklin Institute; and that it is hereby recommended to the board of managers to secure the delivery of such a course next winter." The times were not altogether propitious for the establishment of a regular professorship, but at the beginning of the next year, Mr. Walter was requested to deliver voluntary lectures. These lectures he continued to give from time to time, and his name appears in the Journal of the Institute, to which he frequently contributed as "Professor of Architecture."

He fully appreciated the dignity of his art, and from the first his pen and his public utterances all tended to one end—its elevation and the cultivation of high aspirations among its practitioners. Thus, in 1841, he writes: "If architects would oftener aim to think as the Greeks thought, than do as the Greeks did, our columnar architecture would possess a higher degree of originality, and its character and expression would gradually become conformed to the local circumstances of the country and the republican spirit of its institutions." Among the articles in the journal, which appeared from his pen during these years, may be enumerated the following: "Architecture in the Middle Ages"; "Formation of an Artificial Spectrum"; "Order of Architecture"; general articles under the

* Read as a committee report before the twenty-second convention of the American Institute of Architects, at Buffalo, October 18, 1888.

head "Architecture"; elaborate reports and descriptions of the designed construction of the County Prison and of the Girard College (which he was then building from his own designs), besides numerous other articles.

Mr. Walter's professional practice rapidly increased after his design for the "Girard College for Orphans" was adopted in 1833, the cornerstone of which building was laid on July 4 of that year. When the structure was complete, in 1847, he was elected one of the Board of Directors of the college, and served in that capacity for three years. In 1838, the building committee of the college sent Mr. Walter to Europe for the purpose of "examining the practical workings of the various devices and appointments for health, convenience and comfort, in the principal seats of learning in Great Britain and the continent," with a view to derive such information on these subjects as would be likely to prove useful in fitting up and furnishing the building of the college.

We must now refer to an event which advanced architectural development and was the beginning of systematic and united methods of architectural practice in the United States, namely, the attempt, in 1836, to found an "American Institution of Architects." At that time there was only a little over a half score of properly trained architects in the country. These gentlemen met in the city of New York on December 7, 1836. Mr. Walter was one of the pioneers and most active promoters of the movement, and of the group of architects who met on that day, one alone remains, Alexander J. Davis, the architect of the University of the city of New York and of many other important edifices, and now a corresponding member of this Institute. A draft of a constitution was formulated, and the members adjourned to meet in Philadelphia on the first Tuesday in May, 1837. The circular calling for this meeting, dated March 23, 1837 (a copy of which interesting document hangs in the office of the Institute in New York), was signed by Thomas U. Walter, secretary.

The meeting took place at the Pennsylvania Academy of Fine Arts, but it embraced only a handful of members, and it was found that they were too much scattered for mutual sustenance and the strength necessary for a brotherhood.*

The "Institution" struggled for a while, flickered, and was apparently quite extinguished, though it was really from its ashes that our present Institute, Phoenix-like, sprung.

Mr. Walter's position was soon assured, as his merits were appreciated by numbers of influential citizens, who rewarded him with their patronage by confiding to him the designing and construction of noble works, built in the pure Classic style, of which he was the most strenuous advocate and enthusiastic student.

In the early days of his successful practice, it was generally the custom in Philadelphia to have the dwelling and office of architects in the same building, or adjoining each other, and thus there was a more intricate and friendly acquaintance between the students and the preceptors' households than in these times. Mr. Walter was always affable and kind toward his students, and always took pleasure, during his leisure moments in the office, in lectures to them, and imparting knowledge in practical and æsthetic subjects, but although he had many during his early career, most of them lacked the patience and perseverance necessary to acquire the requisite knowledge to become successful practitioners, and eventually drifted into other pursuits.

Among Mr. Walter's works of private practice may be enumerated the St. George's Hall, the Preston Retreat, the Debtor's Apartment, the Philadelphia Savings Bank and several churches in Philadelphia, the Chester County Bank, the Biddle and Cowperthwaite villas on the Delaware river, and other buildings in the country.

But all these creditable labors were but the training and leading up, as it were, to the one great work with which his name must ever be associated—the extension of the National Capitol at Washington, together with the noble dome which surmounts and dignifies its mass.

The appointment of Mr. Walter as architect to execute his design for the extension of that truly noble building, was made by President Fillmore, in 1857. It was well merited, for, of all American architects of that date, Mr. Walter was the best fitted, by steady and innate love for the purest types of Classic architecture, to grasp, successfully, the problem of the capitol extension, and to design the dome with which he later glorified and crowned his work. The boldness of his composition evinces his skill as a designer, and his confidence in himself. The vast wings forming the extension are of white marble of great hardness and durability—they have taken upon them, with years, a delicate pearly color, which, as it shows itself in the long colonnades, gives them an effect of purity and beauty.

Much as we pride ourselves upon the advances made in architectural design, we have nothing to show more nobly simple and well studied than this, the grandest of Mr. Walter's works. Such is the verdict of the architect and the critic.

Fergusson, the historian of architecture, and often a severe censor, writes: "Taking it all in all, however, there are few buildings erected in modern times which possess to a greater extent than the capitol at Washington appropriateness of purpose, combined with the dignity necessary for the senate house of a great nation. It has not the variety and richness of detail of our parliament house, but it is a far statelier building, and its faults are those of the age in which it was commenced, and which here tied the hands of subsequent architects, and prevented them from using the improvements that have since been introduced in the arts of design; but it wants but very little to enable it to attain to very high rank among the buildings of its class in other parts of the world."

The Hon. J. N. B. Latrobe, son of the architect of the original capitol at Washington, Benjamin W. Latrobe, thus eulogized Mr. Walter in an address before the American Institute of Architects in the city of Washing-

ton, at its fifteenth convention, in 1881. Speaking of the extension of the capitol, he said: "I can scarcely speak in his presence (President Walter being in the chair at the time) as I would like to speak, could I find words, to do justice to the last architect of the vast pile that now looks down upon the Federal City. The pupil of Strickland, as Strickland was the pupil of my father, it has been with me a pleasing fancy for more than a quarter of a century to believe that there was, in a faint way, a law of descent, applicable under the circumstances, which connected the architect who clothed Thornton's skeleton with sinew and muscle and beauty, until the whole creature became his own, with his brilliant, refined and accomplished successor, who, at the head of a profession socially, today, without a superior, has absorbed all that has been done before in what is now the capitol; who, making the magnificent dome, on whose iron sheets the hammer never ceased to ring during the war that threatened to make the whole structure worthless, has screened withal the exterior littleness of a vitiated taste, and made even the incongruities of the Italian Renaissance subserve the purposes of genius."

Ill-health compelled Mr. Walter to resign from the service of the government on June 1, 1865, and he then returned to Philadelphia.

Among the important works that Mr. Walter executed in Washington for the government between 1857 and 1865 are the extension of the patent office; the repairs of the congressional library; the extension of the treasury building; the general postoffice extension; the government hospital for the insane.

In 1849, the honorary degree of master of arts was conferred upon Mr. Walter by Madison University, N. Y.

In 1853, the University of Lewisburg, Pa., conferred upon him the degree of doctor of philosophy, and in 1857, Harvard University gave him the degree of doctor of laws. He also became a member of the American Philosophical Society, of Philadelphia.

In 1860, he delivered a course of lectures on architecture, at Columbian College, D. C., and also in Philadelphia and vicinity.

Doctor Walter was now well advanced in years and full of honors. After his return from Washington he engaged in but little private practice. When the erection of the new city hall in Philadelphia was commenced, he became connected with Mr. John McArthur, Jr., the designer and architect of that building, and continued to assist him on its work until a short time before his death.

Of Dr. Walter's connection with the American Institute of Architects, the profession may well be proud. The original "Institution of Architects" had slumbered for nearly twenty years when the present Institute was founded, in 1857, and on February 23 of that year, Dr. Walter was elected a fellow. On the retirement of its first president, Richard Upjohn, in 1876, he was elected its president, which office he filled continuously until his death.

At his last election to the presidency, on December 2, 1886, he thus expressed his thanks to the convention; the words, simple and touching, are not to be forgotten by those among his active associates in Institute work who heard them, and seemed to them prophetic of the great change so soon to come upon him:

"I return you my thanks, gentlemen, for your kindness and for your forgiveness. You might have done better all the time; but I began with you almost at the beginning and have been in my place as often as it was possible, and have done the best I could, and I intended when I came here to decline a reelection, but my friends here have been very kind and have asked me to agree to it if I were reelected, and I have agreed to it for another year. After that, if I live that long, I will ask you to allow me to take a rest. As to the year before us, I promise you to do all I can for the promotion of the prosperity of our profession here and everywhere, for the promotion of the interests of our Institute. Everywhere and at all times I am yours, asking you to look over my imperfections and to enable me to feel still further that I have your assistance in these matters connected with our profession. I am deeply interested in them and have been so for nearly sixty years. I shall not be troubled that way sixty years longer. Accept my thanks I pray you."

We have thus followed the career of Dr. Walter from youth to revered old age. His position in American architecture is a proud one. As he modestly puts it himself in the above address, "I began with you almost at the beginning and have done the best I could."

As an architect and scholar, Dr. Walter's professional learning was deep and well digested; in style of architectural composition, pure, artistic and dignified; in social life he was ever the cultured gentleman; in personal appearance, venerable and commanding. "Truth in art," was the keynote in his professional career—the fundamental law which he laid down for himself, and the burden of all his writings and public utterances. "Let us live," he once said, "for the promotion of our art. Let us leave no stone unturned to devise throughout the world the elements of a pure and correct taste."

One more quotation from Dr. Walter's address to the Institute of Architects and I will close this memoir. The last words of his annual address of 1880 speak the whole life of the man—no stronger or more heartfelt words could come from the lips of the Nestor of American architects:

"We owe it to our country, to the age in which we live, to our families, to ourselves, to devote the rapidly fleeting hours of our lives to the accomplishment of the greatest possible good in our vocation; ever seeking to discharge our duties in all good conscience toward those whose interests are intrusted to our care, towards co-workers in the realm of art and towards Him in whom we live and move and have our being."

THE Buffalo Library, where the convention was held, was designed by Cyrus L. W. Eidlitz, of New York City. It is built of red Medina stone basement, red brick, red slate roof, terra-cotta trimmings. The building is four stories in height. The basement contains the rooms of the Society of Natural Sciences; the first or entrance floor, the library; the second floor, the library and rooms of the Fine Arts Academy; the third floor, the rooms of the Historical Society.

*NOTE.—As a matter of history it may be here stated that the persons who attended this meeting consisted of the following named architects, namely: Wm. Strickland, chairman; Tell Walter, secretary; and Messrs. Davis, Rogers, Vroman, and Reichardt. This was the representation out of twenty professional members or professors, as they were called, of the institution. The only associates ever admitted were William Kelly and John D. Jones, both graduates from Mr. Walter's office, and the name of N. Le Brun, then a student in the office, was furnished to the recording secretary as required by the by-laws in the case of a candidate from the lower grade.

Mortars and Concretes of Antiquity and Modern Times.*

BY ADOLPH CLUSS, ARCHITECT, WASHINGTON, D. C.

INTRODUCTORY.

ASK the indulgence of this convention for having chosen the trite subject of mortar. Though much abused and inconsiderately handled, it was and is one of the most essential building materials.

The communities have awakened to the importance of the architect's calling, but they are not slow to fix responsibility and demand guaranties that the materials and constructions specified, controlled and accepted by the architects, will resist all strains as well as the action of time, air, water, freshets, heat, fire, frost and lighter terrestrial commotions. By meeting all reasonable demands we can do much to give direction to these currents and many opportunities are offering.

The public spirit of the architects and engineers of France, guided by the academical spirit of a Rondelet, has succeeded long ago, that every quarryman, as a matter of routine, guarantees the absolute weight and prescribed strength of his material.

Bills of quantities have been incorporated of late in specifications and contracts for our more important work. By making this system more general, and adding to it strict definitions of quality and elements, we can best counteract the disastrous consequences of reckless bidding for work, and strengthen our influence on safe building.

The ingredients and mixing of mortars have vastly improved within the last decade. Physical and chemical investigations have been successfully carried on; important mechanical tests have been collated; so that many new features will appear, though unavoidably data familiar to you have to be interspersed in the essay.

HISTORICAL.

The phenomenal strength and durability of the edifices of the old Romans reap nowadays well-deserved tribute and admiration. The major part of the merit is due to the high quality of the stone and to the superiority of the mortar in the walls.

Though the slow and sure action of time has contributed to the gradual improvement and petrification of the mortar, this should not serve to palliating the shortcomings of our era. It should rather intensify our admiration for the intelligent care of the ancients who checked the tooth of time and made a destructive agent subservient to superior thought empirical modes of building.

The Romans surpassed the modern building regulations, since, instead of petty annoyances, the careful selection of the materials, preparation and use of the mortar, were all appreciated as elements of strong and durable work, and deemed of adequate importance for the appointment of special supervising officers, called ediles, charged exclusively with the details of mortar in use.

Mortar plays an important part in unraveling the mysteries of prehistoric civilization. Of ancient Nineveh comparatively little is known, because the bulk of its building material consists of air-dried clay laid with loam mortar; while the contemporaneous Babylon, built of brickwork joined with asphaltic mortar, is fully explored.

The Egyptians used the silt of the Nile for jointing our dried bricks in the oldest pyramids, and later on followed the precedent of Babylon, with asphaltic mortar. The Grecians, favored by a mild climate, dispensed with mortar. The stability of their monuments was secured by huge stones with carefully wrought and ground beds and dowels of cypress wood.

For dwellings and public works they used largely air-dried clay, so that as late as 362 B. C., when the city of Mantinea was invested, the fortifications were annihilated by softening after the river Ophis had been dammed and diverted by Epaminondas of Thebes.

Even the Romans stuck to the use of air-dried blocks, called lateres, because the dwellings built of this material are cool in summer and warm in winter.

The solidification of the old-time mortars is based upon a mere mechanical desiccation. It was a wide step to arrive at satisfactory results with mortars, the materials of which required chemical changes preparatory to use.

The invention of lime mortar, veiled in the distant past, is due either to the Phoenicians, or to the Egyptians, since in the later pyramids Nile silt occurs mixed with lime. This invention, big with results in advancing human culture, has made little progress for thousands of years, and only the latter part of our century may boast of important results.

The far more difficult task to produce a water-resisting mortar again antedates the Christian era. The Romans knew how to produce a hydraulic mortar by mixing lime paste with puzzolana. Vitruvius says of it: "Mixed with lime, it gives to every building great strength, and piers constructed in the sea harden even under water."

Concrete was also used by the Romans, and later by the Moors and masters of the middle ages for architectural work as air concrete, as well as for hydraulic engineering. The Pantheon in Rome was constructed of puzzolana-mortar concrete, filled in solidly between interior and exterior masonry facings. No unequal shrinkages and settlements have occurred anywhere in the wells.

During the Middle Ages, the tradition of the good mortar was kept a secret in those centers of superior workmanship, the sites of renowned cathedrals, but in many churches which are kept erect by expensive nursing, the mortar has become an inert powder, devoid of strength and hardness.

Up to the middle of the eighteenth century, puzzolana, imported from Italy and France, from Germany, via Holland, were the standard ingredients for hydraulic mortar in England. Anno 1756, the Eddystone light-

house was consumed by fire. John Smeaton, intrusted with the erection of a new structure, searched for native materials for a mortar which was to resist the action of surf and sea.

The lime from Aberthaw answered his purpose best. He investigated the cause, and proved before long that but those limes resist the water which, when treated with acids, leave argillaceous residues. The ban was broken. In the year 1796, Parker introduced a product burned of lumps of chalky clay from the English coast, and called it Roman cement, because its color resembled Roman puzzolana.

The inference followed that hydraulic cements might be produced artificially of lime and clay. Consistent efforts revealed to M. Vicat, the French chemist, the due combining proportions and temperatures of calcining for a hydraulic cement which was, about the same time, empirically invented by Joseph Apsidin, an English mason.

After trials with waste clinkers, under Parker's process, he pulverized the calcareous detritus produced by the wear of the limestone roads near Leeds, mixed clay with it, and burned it in a kiln, at red heat. He called it Portland cement, since it resembled the Portland stone in color.

About the year 1827, Sir Charles Pasley, a conscientious investigator, improved and cheapened Apsidin's process by selecting the English chalk, an uncrystalline, fine-grained, earthy, porous limestone, of little cohesion, as best suited for manufacturing the cement. He mixed it with clay from the deposits at the mouth of the Medway river, near Chatham, and calcined them. The special merits of calcination at white heat were then not known, so that quality could not be relied upon.

In the year 1828, Prof. Fuchs, of Munich, formulated the first scientific theory of the action of hydraulic limes, and proved in a prize essay that Portland cement, which, so far, had been a secret of a few manufacturers, might be produced anywhere, from a variety of materials.

For want of successful competition, the manufacture was carried on empirically for many years more, hence the cement lacked uniform quality, the elements of progress, and brought but low prices. Many wrecks are of record where Portland cement had acted mischievously, so that engineers and architects had no confidence in it, on account of supposed treacherous qualities.

The new material dragged along with scanty recognition until, in 1858, John Grant, by experiments, and adherence to a system of details, enabled the London drainage works and the Thames embankment to be carried on, unerringly, as to good quality of the cement. The standard was now gradually raised and reduced; but this pioneer's experiments were of necessity incomplete.

Owing to local causes, it appeared that by adding to the weight of the cement, its tensile strength was largely increased. From this, unfortunately, the basis was reduced, that great weight was more desirable than fine grinding.

Grant's merits and high standing caused his dictum to remain unquestioned long after experiments had pointed it out as a fallacy. The labor of Reid, Mann, Newman and others in England; Michaelis, Banschinger, Dyckerhoff, etc., in Germany; of Zürek and Hanenschild in Austria, and the valuable tests of the late General Gilmore, U. S. E.; W. W. Maclay, Eng. of the N. Y. depot of docks, 7,000 tests.

Eliot C. Clarke, of the Boston Main Drainage Works, 25,000 tests; E. J. Desmith, of Washington, and others have reversed the fallacious doctrines. The importance of fineness is recognized and we command brands of uniform quality, which equal the strength of good building stone.

In the interesting annals of the material, each successful new factory may be claimed as a triumph of modern science, because a great variety of raw materials produced an approximately equal quality of cement, provided that each is individually treated and mixed.

Still the chemistry of the silicates is yet undeveloped. The observations and conclusions of leading experts conflict sometimes and neither contestant may be in a position to adduce strict proofs. I have therefore endeavored to condense from the scattered information such largely accepted facts and theories as tend to direct the attention of the busy architect to the vital points at issue.

We now proceed to the technical branches of the explanation.

INGREDIENTS, CLASSIFICATIONS AND PROPERTIES OF MORTAR.

The principal ingredients of rich mortars, the cementing substances and carriers of plasticity required for the setting of hydraulic mortars and cements, are the limes. The dense limestones, fine-grained, crystalline rocks, chemically called carbonates of lime, form the standard material for the mortar industry. By calcining different limestones, rich or fat limes, hydraulic limes, and cements are obtained.

In modern practice pure lime mortars are considered as secondary building materials of scanty resistibility formed under unfavorable conditions. Normal mortars are to contain combinations of lime with silica and other bases, approaching the strength of bricks and stones; these rank as primary materials of construction.

Good mortar is to have plasticity when mixed with large doses of sand and after solidification compressive strength; tensile strength, as evidence of independent cohesion and force to defy frost and heat; adhesive power for cementing blocks to monolithic bodies.

It is to be invariable in volume during and after solidification, to be weather proof, and for hydraulic works also water tight. All mortars are generally mixed with sand. It imparts crushing strength, lessens shrinkage and saves expense in lime mortars.

Hydraulic cements require sand only at exposed surfaces. Otherwise it serves as an adulteration for reducing a surplus of strength and density to actual requirements of a given bulk.

The sand should be clean, sharp, large grained, not too uniform in size, free from loam, well screened, and, if necessary, washed. Admixed particles of clay adhere to the sand and form diaphragms between sand and mortar, which for durability require close contact.

Puzzolanas are pulverized volcanic rocks, composed chiefly of soluble silica, alumina, iron, and small quantities of lime. They produce hydraulic mortars, when mixed with lime, instead of ordinary sand. Where better

*A paper read before the twenty-second annual convention of the American Institute of Architects, at Buffalo, October 18, 1888.

materials are scarce, pulverized bricks and similar materials form weak artificial puzzolanas.

Since sand is mostly used in greater quantities than the cementing substances, it equals them in importance. It is in all cases imbedded in the matrix as a mechanical mixture. Tensile and crushing strength of the same cement, with equal doses of different qualities of sand, vary more than those of different brands of cement within the same group, do among themselves.

In slacking limes or mixing cements, a certain quantity of water must form with the solids chemical combinations, called hydrates. An additional quantity is necessary for imparting plasticity to the paste which evaporates again during the hardening, hence a too lavish use of water renders the mortar porous.

Clear rain or river water is best suited, since water from wells or springs is often impregnated with carbonic acid or other deleterious substances. Natural cements require more water than Portland, fine ground more than coarse, and quick-setting more than slow-setting cements.

The lime mortars solidify by evaporation and pressure. Induration proceeds slowly from the surface inward. The cement mortars enter the chemical combinations promptly, in proportion to and with the energy depending upon the materials which are ready formed by the process.

They set by a physical and chemical process, while reaction, begun by the agency of heat, is perfected by the action of mortar. As soon as the combinations are accomplished, creative activity is confined to secondary formations.

Induration goes on at once, simultaneously through the whole mass, but hardens, and strength increases for variable periods. An often mooted question, related to the subject under discussion, may here be alluded to. Is it safe to use cement on the second set?

Cement having set before me in the pan or on the mortar board, is probably not damaged chemically when plasticity is restored to new additions of water, but its density will be lessened, and in consequence its efficiency. However, for a day or so, as long as the water has not been evaporated or absorbed, these bad effects may be obviated by simply beating, manipulating, and stirring the congealed mortar with a minimum of water, when a mortar of little hydraulic energy, but slow and sure increase of density, will finally result.

Consistent encouragement of the mortar men, for using their muscles and strength, is indispensable for the success of this makeshift for overcoming a difficulty without doing harm. Shrinking mortars are, and have been prolific sources of disasters in walls faced with thin jointed materials and backed with material having heavy mortar joints.

The adhesive or cementing power with masonry is a most important requisite of mortar. Until lately this was, and is still, largely the dark horse of the mortar theories. Mann has ascertained by twelve thousand special tests, that pure Portland cement of 425 lbs. tensile and 5,640 lbs. compressive strength per square inch, has but 60 to 80 lbs. adhesive strength to limestone, and that the proportions of tens to adhesive strength varies from 9.1 to 5.1.

In fact, these are different things, which bear no comparison. While tensile and compressive strength are based upon physical attraction between homogeneous molecules, the adhesive power is formulated under a different physical law.

Hanenschild has for years investigated it, and finds that it is largely based upon the adhesion of contiguous surfaces, intensified by an intermediate moistening fluid of glutinous consistency, which brings about the transition from apparent to real adhesion.

With absolutely tight contact, the resistance to separation would be infinitely great. It decreases with the square of the distance between the surfaces, and differs in intensity for heterogeneous plates of equal weights and sizes, or for dissimilar liquids.

Both fat-lime mortar, as well as Portland-cement mortar, resemble glutinous substances, but, under the microscope, the first shows an emulsion of minute, swelled, moistened globules in partial solution, while the second appears as a mixture of semi-vitreous, swelled scales separated by water.

NATURAL CEMENTS.

Limestone, with intimate, fine-grained admixtures of silica, alumina, magnesia, etc., in quantities of 35 to 60 per cent, are called cement stones. The high percentage of silicates causes a separation of the alumina from the silica during calcination at red heat just sufficient to expel the carbonic acid.

Oxides of iron and chlorides of potash are generally present in small quantities. They assist hydraulicity and crystallization. A cement of porous, friable, globular texture, with a specific gravity of about 2.7, is obtained. It contains silica and alumina in soluble state, and hence the lime can easily act on either, according to affinity, when water is added for mixing and hydration.

The burned lumps must be pulverized before they will combine with water when they form hydrated silicate of lime, while the alumina remains practically inert. These cements do not heat up, nor swell sensibly while they are mixed. They set quickly, but harden slowly under water without shrinking, and attain, gradually, great strength, with well-developed adhesive force.

The color of these cements give no clue to their cementitious value, since it is chiefly due to oxides of iron and manganese, which bear no relation to hydraulic properties.

To insure efficient chemical action in hardening, the grinding must be carried to the production of impalpable powders. These cements bear doses of sand of double their own volume or over. Mixing pure cements, from 30 to 40 per cent of water must be added.

Many American cements of this class contain large percentages of carbonate of magnesia. The tests of strength, in pure state, as well as mixed with sand, compare well with the cements which do not contain these combinations.

These cements have good adhesion to stone and bricks, because they pass with their surplus water slower than the others. Whenever judi-

ciously selected and conscientiously manipulated, they have given full satisfaction. Many causes coöperate in affecting rocks of the compound character, required for the production of hydraulic cements.

Deleterious material is disseminated through the various strata of a quarry in constantly and widely changing proportions; each stratum exhibits heterogeneous features, hence it taxes judgment begotten of large experience, honesty, carefulness and skill to keep up reasonable uniform quality.

Different quarries show dissimilar stones; the best brands vary greatly in chemical composition. Fineness, density, thorough and homogeneous mixture, humidity, accessory ingredients, enter largely in the problems. To preserve the activity and strength of the natural cements for a longer time, air and moisture must be excluded by careful packing and dry storage of the barrels, otherwise the premature production of carbonate of lime will interfere with the subsequent hydration.

De Smeth found for our native Virginia cements in pure state, after thirty days exposure, 170-250 lbs. tensile strength per square inch, which increases in eleven months to 316-381 lbs. Mixed with equal portions of sand he obtained from 116-195 lbs., and L 80-L 90, as above.

Gilmore states the adhesion of Rosendale cement to the front bricks, after twenty-eight days, when pure, to be 30 lbs., and mixed with 1 and 2 parts of sand, 16 and 12 lbs.

Clarke reports the tensile strength of Rosendale cements, pure:

After 1 and 12 months, as	145 to 290 lbs.
And mixed 1:1 after 1 and 12 months.....	116 to 256 lbs.
1:2 after 1 and 12 months.....	60 to 180 lbs.
1:3 after 1 and 12 months.....	35 to 121 lbs.
One cubic foot of Rosendale cement weighs	49 to 50 lbs.

The proportion of tensile to compressive strength averages probably after one month 1:4, and rises probably, after two years, to about 1:6. The specifications of the engineer department of the District of Columbia, require, seven days after mixture, for neat natural cement 95 lbs., and for mixture with one and two parts of sand 56 and 22 lbs. tensile strength per square inch.

The gradual increase of strength by time is carefully noted, and establishes the reputation of the accepted brands.

NATURAL PORTLAND CEMENT.

Natural Portland cements are manufactured in those rare cases where rocks are traced, which contain combinations of lime and silicate of alumina in the chemical proportions and physical conditions found necessary for producing artificial Portland.

The treatment then differs from that of ordinary cement only in the higher temperature for burning. There are extensive works of this class around Perlmoos in Germany, Grenoble in France, etc.

ARTIFICIAL PORTLAND CEMENT.

Most of the progressive governments and organized bodies of architects and engineers of the world have been, within the last decade, taking action on the material, and comparative value, none of which are finally adjudicated, is apropos unadulterated.

The artificial Portland cement of commerce is a product, in which pulverized chalk or limestone is intimately mixed with such a quantity of pulverized clay as will produce, when calcined at white heat, vitreous but not entirely melted clinkers, which, when pulverized and hydrated, harden under water.

Being entirely under the control of the manufacturers, the Portland cements are less variable than the natural cement. According to Dr. Michaelis, the foremost cement expert now living, the raw materials, when dried at 212 degrees Fahrenheit, consist essentially of 75 to 79 per cent, by weight, of carbonate of lime, and 24 to 29 per cent of silicate of alumina, clay.

These, when burned, represent 62½ to 67 per cent of lime and 33½ to 29 per cent of silicates, silica, alumina, oxide of iron, leaving 4 per cent for accessories. After the hardening of the hydrated cement a transformation by complicated reaction has taken place into hydrates, silicate of lime as the most important ingredient in hydrated aluminate of lime, ferruginous lime, hydrate of lime, basic sulphate of lime and carbonate of lime.

Microscopic examinations of other investigators do not conflict with this analysis. During the calcination, alumina and oxide of iron, which acted in the clay as bases, assume the role of acids toward the lime, the calcinated oxide of iron acting as flint in the fire.

A preponderance of alumina favors quick setting, while an increase of iron has the opposite effect. The ingredients being pulverized are mixed into a homogeneous paste, baled, dried and burned by exposure to a quick white heat, equal to the melting point of wrought iron. This causes first, the expulsion of the chemically bound water and carbonic acid, and next a softening of the whole mixture.

When partial vitrification sets in, the heat is to be promptly stopped, since a higher heat or a continued, oxidizing heat of the normal temperature will ruin the cement which now requires rapid cooling as much as it did a quick heat before. At this stage the sifting lime is allayed with the softened clay, while neither is in fusion yet.

A disposition for the formation of new combinations of lime, with silica, alumina, oxide of iron, etc., is induced without allowing these nascent combinations to be fully consummated, because they, as crystalline bodies, would impede the subsequent hydration and the dense interlocking of the molecules during the setting, crystallization, of the cement.

Under these circumstances the lime, though not chemically combined, is engaged and kept out of harm's way. The high temperature in the kiln has gradually condensed the mass, and most prominently the silica. The globular texture attained in moderate heat was simultaneously transformed into a limited semi-vitreous texture.

The Portland cement owes its high reputation largely to such physical changes. Globular texture makes contact by points, while laminated texture achieves more intimate contact by surfaces. In our case it secures in

strata of equal height about 50 per cent more cementing substance than a mass of globular particles.

This close packing intensifies cohesion of which the high tensile strength is the brochant. After cooling, the clinkers are ground to impalpable dense, drossy, steel-hard powder, having a specific gravity of 3.0 to 3.15. A few weeks' storage seasons the product and makes it ready for use.

AS TO THE SETTING AND HARDENING PROCESSES.

All the combinations produced during calcination contain more lime than can be disposed of, for the formation of hydrates, when the cement is mixed. Hence, under the influence of water, decomposition sets in, combinations are formed which are poorer in lime, and lime is disengaged which, in the presence of alkalies, soda and potash, crystallizes to some extent.

In the hardening cement there is not any combination of lime which is insoluble in water. The durability of hydraulic cements in water, and prominently in the sea, is not caused by their chemical composition, but by physical properties mentioned above, and in addition by part of the liberated lime absorbing eagerly carbonic acid from the atmosphere, and forming insoluble carbonate of lime which makes a protecting coat over the surface of the cement, and counteracts the decomposing tendencies of the water.

Under the influences the texture of the cement is sufficiently condensed for debarring access into the interior of the wells to the carbonic acid itself which, when moist, would act on all the calcareous combinations with silica, alumina and iron. As accessory ingredients occur in Portland cement, sulphate of lime and other combinations of sulphur which, combining with seven chemical equivalents of water, and even more, cause considerable increase of volume.

This explains why a large percentage of sulphuric acid endangers the durability of hydraulic cements, while a small addition of it tends to increase their strength. If the contents of clay in Portland cement rise above 50 per cent of the calcined lime, overlaid cement, complete vitrification is to be feared during the burning, the lack of cementing substance, lime is felt, and the cement becomes an inert mass unfit for use.

On the other hand, an overlimed cement tends toward quick-setting and blowing or expansion. These efforts, due to presence of free caustic lime, may be remedied by airing such cement, for a day or more, when the caustic lime will absorb carbonic acid from the air and become an indifferent body for the cement.

There is for each material one most favorable proposition in which the tendencies to shrinking and to blowing neutralize each other so that a good cement is the result. The chemical reaction require, for cement burned at white heat only, half as much water as those burned at moderate heat; this no doubt contributes to the superior strength of the Portland.

Water, 20 to 25 per cent of the weight of the cement, generally suffices for mixing pure cement. Mixtures with sand, according to its dry or moist state, require increased quantities. By far the strongest mortar, with or without sand, result from mixtures in a state of incoherent dampness with no more plasticity than absolutely necessary for the work in hand.

Too long continued stirring, or excess of water, prevent setting, a paste being formed which slowly hardens by shrinkage, caused by evaporation and pressure, analogous to fat lime. Normal material and treatment result in slow and cool setting, but comparatively low adhesive power.

The strength increases for a slow-setting cement gradually for about two years, while the comprehensive strength increases for many years. All Portland cements bear very large doses of sand. These gradually retard setting and reduce the tensile strength of pure cement, one year after mixing, for 1, 2, 3 and 4 parts of sand to one of cement, by 25, 50, 60 and 70 per cent, Michaelis' and Grant's tests.

Excessive doses of sand make a hard, raw mixture difficult of manipulation, hence become unsuitable for architectural work. Portland cement is dangerous for use in fastening projecting blocks or ornaments to walls. The fat cement mortars shrink on exposure to air.

In addition the silica, the texture of which was condensed by the extreme kiln heat, expands within the mass during the hardening process, and as a consequence drops of water are observed to be pressed out of the pores of the mortar.

The cement, then, frequently separates from the surface which it had cemented before, especially if they consist of very dense stones, like granite and marble. Michaelis has followed up this mischievous tendency minutely.

AS TO THE COLOR OF THE PORTLAND CEMENT.

Silicate and aluminate of lime are white. This ground color is covered by colored combination, in which the vitrification is effected. Well Portland cements have a greenish brown color, caused by dark brown ferruginous lime, and the intensively green manganese salts. Weaker burned cements appear greenish green because this ground color is but partly covered.

Admixed sulphates occasionally cause yellow, reddish and green color. The properties of Portland cement are often misleading. Light weight may be caused by laudable fine grinding or by objectionable weak burning.

As a consequence of such dilemmas, J. Newman writes, in 1887, specifications of Portland cement at present still differ as much as 300 per cent in requirements as to fineness, 18 per cent as to weight and 100 per cent as to strength.

Uniformly there is only on the time of the tests the tact and intelligent observation required for obtaining reliable tests, has led to the adoption of standard rules by the German architects and engineers in 1877.

These were substantially indorsed by the German government in 1878, and afterward by Australia, France, Sweden, Russia, Belgium and Switzerland, and made the basis of recommendations by the Society of Civil Engineers of the United States in 1885, and revised anew by the German government in 1887.

The latest phrase of these tests may well be alluded to. They are for general use mechanically, relating to weight, fineness, setting, invariable-

ness of volume and strength, leaving the important microscopic examination of thin sections showing the texture, of chemical analysis, and of adhesive power reversed for test cases.

CEMENT TESTS.

The weight of Portland cement varies from 70 to 92 lbs. per cubic foot for brands of equally good quality. Since we buy by weight it is immaterial what size the manufacturer must give to a barrel in order to bring it to the standard gross weight of 200 lbs., but each factory should be held to uniform weight of its out-put, the extreme difference not to exceed 2 per cent loss by leakage.

Finest grinding of the whole mass coming from the kiln, and not merely fine sifting with a large percentage of granular residues on the sieve, is very important. All the granular residues, even on the finest silk sieves, have, practically, no setting power, and act little better than good sand.

They represent the well burned clinker which did not yield to the action of the mill stones as readily as the softer pieces. Finely ground cements have largely increased values for mixtures with sand. The new German regulations allow a residue of ten per cent on a sieve of 13,000 meshes per square inch.

Cements which set in less than half an hour are called quick setting, and those which do not set before two hours, slow setting. These distinct provisions prevent misunderstandings as to what is meant by a slow-setting cement.

Excepting special cases, slow-setting cements, as most trustworthy and best suited, must be specified for all works in architecture. According to the prevailing American, Gilmore, needle test, cement begins to set when it bears a wire of $1\frac{1}{2}$ inch in diameter loaded with $\frac{1}{4}$ lb., and has set when it bears a needle with a flat end, of $\frac{3}{4}$ inch diameter, loaded with 1 lb., without making any impression on a flat cake of cement. Whether the volume of the cement has altered during or after setting is ascertained by immersing in water a thin cake spread upon a glass plate.

Signs of crumbling or cracking at the edges indicate expansion. Fissures in the center of the cake arise generally from premature exposure to drafts or sun heat, which causes shrinkage.

The cementing power of Portland cement shall be ascertained by a mixture of sand and cement, as used in actual work, since reasoning from tests on the comparative value of different cement for mortar is unavailable. A most interesting instance is presented by tests made by the Association of Civil Engineers, of Bonn, Prussia.

Pure cement gave, after twenty-eight days, 426 lbs., and after six years 556 lbs. tensile strength. One volume of same cement, mixed with three parts of sand, gave, after twenty-eight days, 170 lbs., and after six years, 720 lbs.; average tensile strength 160 lbs. more than the high figure for pure cement.

For all mortars, or cements, test sands of equal size, quality and condition must be used for obtaining comparative figures. This is done by washing and drying quartz sand, removing the coarsest parts by a No. 20 sieve, 400 meshes per square inch, and the finest particles by a No. 30 sieve, 900 meshes.

Tensile strength has been generally used of late years as the convenient gauge for resistance to other strains. Though these relations are not uniform for different cements, it should be upheld as the expression of the cohesion of the mortar. The German regulations have restored as the leading test that for compressive strength. They require slow-setting Portland cement, mixed in the proportion of one part, by weight, to three parts of regulation sand, to have a minimum tensile strength of 230 lbs., and compressive strength of 2,800 lbs. per square inch, after twenty-eight days' exposure—one day in the air and twenty-seven days under water.

It is a grave error to require on works above the water level, a too high tensile strength, at an early day. Hydraulic quickness for exposure to the atmosphere is obtained at the expense of durability, while moderate strength and gradual increase with age are to be encouraged.

Maclay continued to test cement rejected under the seven days' test. It overtook the accepted cement after a fortnight, and after eighteen months the advantage gained was kept up, 487 against 439 being the ultimate figures of strength.

The strength of the cement increases from 35 to 40 per cent in the interval between seven and twenty-eight days after mixing. The proportion between tensile and compressive strength, and between seven and twenty-eight days, having been ascertained for a brand—new cargoes received during the season—may be controlled by the tensile test, after seven days exposure for adhesive strength. There are no new data, Mr. Grant found, for a mortar of 1.2 of sand, after twenty-six days at 15 to 30 lbs. per square inch.

The properties of Portland cement, as enlarged upon, characterize it as an excellent building material, especially useful in hydraulic architecture and important works where heavy strains must be withstood within a few days or weeks after they have been built.

At high places where no difficulties from water are met and the load is but slowly and gradually imposed, reliable, slow-setting, natural cements are competent competitors to the Portland, since a breaking weight of 300 lbs., attained by the latter in a week, is by the better class of them approached within a year, so that a mortar mixed with them is of comparative value to Portland cement mortar, provided that equal care has been used in either case.

MIXTURES OF CEMENT.

Clarke, Boston, tested Portland cement mortar, mixed in the proportion of 1 : 3, and also Rosendale cement in proportion 1 : 1. One year after mixture he found the tensile strength of each to be 256 lbs. A richer natural cement mortar was equal to the weaker Portland cement mortar.

He also mixed one-half part of Rosendale cement and one-half part of Portland cement with two parts of sand, and obtained, after one year, 273 lbs. tensile strength, while the same cements, separately mixed, gave for Rosendale, 1 : 2—180 lbs. and Portland, 1 : 2—323 lbs., the average being 251 lbs. Hence, the mixture showed a small gain, probably caused by

increased density, in consequence of mixing cements of different texture. Consequently, mixtures of natural and Portland cements are unobjectionable and safe.

MIXTURES OF CEMENT, LIME, ETC.

Superior strength, capacities for sand and hydraulic qualities, characterize Portland cement, but the adhesive power to brick and stone is not developed in lime mortar. It has long been an American practice to reinforce ordinary lime mortar by additions of natural cements.

Strength and hydraulic qualities are added to the solid adhesive qualities and durability of good lime mortar. Under competent management success has followed these mechanical mixtures resembling hydraulic limes, like the imported popular lime De Theil.

Similar results have been lately obtained on the new frontier fortifications of the German Empire. Portland cement mortar containing large doses of sand is mixed with lime paste. Large increases of adhesive power to bricks, and even small increases of strength resulted.

The explanation appears to be because a small quantity of the strong material resists the tensile and crushing strains, hence the addition of large doses of sand. But to be of use as a mortar, this diluted mixture lacks power for cementing bricks together, and this is economically and well increased by lime paste.

Provided that the total amount of the mortar substances is large enough to fill the voids of the sand, the added lime serves to fill the still considerable interstices between the particles of cement. This gives higher density—the greatest strength possible with the large dose of sand, and is important for architectural work.

The special requirements of the best mortars for architectural work have not been brought out yet with efficient force. In the mixtures of lime paste with the natural and artificial cements the true solution will be found most likely, because they permit to approach in grade and intensity the slow and steady action of the hydraulic limes, which make excellent material for works exposed to the atmosphere, though they are of limited importance for hydraulic engineering.

Dr. Michaelis writes: "It has been overlooked of late that water is the element in which the hydraulic mortars develop their full efficiency." All hydraulic cement require for their preservation, protection against desiccation, hence moisture.

Such cements as consist substantially of hydrated silicates of lime alone, act well under water, but when exposed to the atmosphere they are acted upon by carbonic acid, when carbonate of lime, an insoluble body, is formed, an action accompanied by considerable shrinkage, causing minute fissures, which must end, sooner or later, with destruction with atmospheric influence.

CONCRETE.

Concrete is case masonry made of mortar without artificial bond, into which pebbles and broken stone, or similar material, are imbedded, in order to reduce the consumption of mortar. The lime or cement act as the principal material of construction; the coarse, inert accessories are called aggregates on ballast.

The strength of concrete depends upon the cohesion of the mortar, adhesive to the aggregate, irregular bonding or interlocking of the coarser fragments, and upon the strength and proportion of each ingredient. Rough, coarse-grained, clean sand is best.

Maclay found 11 per cent decrease of strength in Portland cement mortar, mixed 1:1 of fine sand, as compared with coarse sand. With larger doses of sand the loss is greater. To insure compact packing, the ballast consists best of a mixture of crushed stone, one to three inches diameter, and pebbles, which are at least equal to the strength of the mortar.

Sun-dried or rain-soaked material is to be strictly avoided. The cementing substances depend upon the use of the concrete. The finest condition for a solid, durable concrete above water is, that it is as dense and homogeneous as possible while setting.

Judicious handling of medium quality material may bring out a good concrete, and prevent a dead waste of cement, frequently resorted to, to counteract the results of defective manipulation. Concrete has a specific gravity of 1.5 to 2.5 according to its composition of crushed bricks or heaviest stones.

A cubic yard weighs from 2,500 to 3,900 lbs. All the voids between the stones need not be filled with mortar. Only enough mortar is required for forming a coherent, reticulated form between the coarse ingredients which, by interlacement, consequent upon tempting, approach each other in numerous points and surfaces.

This secures the necessary frictional stability, without sacrificing the advantage of permeability, or slight porosity, which favors natural ventilation by the diffusion of air through heavy walls. The French architects use air concrete largely for filling in walls of unusual thickness on monuments, or ornamented projections of buildings.

For the architect's practice in the N. L. hydraulic concretes for use in foundations is the object of importance. It should be water-tight, hence the voids in the larger-sized ingredients must be filled solid by the mass of the mortar, and the latter is again to be so constituted that the voids between the grains of sand shall be closely filled by the cement paste.

The addition of water is to be limited to the actual requirements which fluctuate for natural cements between 50 and 55 per cent, and for Portland cement between 40 and 45 per cent of the weight of the cement used. Plasticity is only to be attained by diligently tempting an apparently dry mass until water appears on the surface. The proportions of this material are to be ascertained by measuring the respective voids.

If stones passing through a 2-inch ring, mixed with pebbles are used, the space between the stones will approximate 28 to 35 per cent, to which an efficient safety of 15 per cent ought to be added for obtaining the amount of sand needed.

Since concrete work once done cannot be well controlled, it is for the superintendence to watch that these legitimate coefficients are not ever, by heavy discounts, chargeable to indifference, carelessness and dishonesty.

The voids between the grains of sand will probably amount to 33 per cent; that is to say, 67 per cent of the cubic contents to be occupied by the mortar are absorbed by the sand, and 33 per cent are to be filled in with cement, so that a mortar of one part of cement to two of sand, and no more, is required.

This mixture may reach, after four weeks, a compressive strength of 175 tons per square foot. The eight volumes of material fill, finally, a space of about five and a half volumes. A weaker compound, not strictly water-tight, would be 1:3:6, one-half, General Casey tested; and Portland cement mixture of 1:2:7, three of pebbles and four of broken stone; it was 138 days' old, and showed the first crack at 125 tons, and crashed at 155 tons per square foot. This mixture was successfully used for enlarging the foundations of the Washington Monument, which implied transverse strains at the outer ends of the concrete slabs. The maximum pressure upon the ground under this structure is five and a quarter tons; but since the maximum pressure at the outer edge of the foundation is nearly ten tons, the concrete immediately underneath may be assigned to be equally loaded.

As for concretes made with natural cements, a mixture 1:2:4 is used in a forced condition for the Washington aqueduct extension, nearly four miles in length, where it is subject to a hydraulic proportion pressure of 4:4 tons, a water column 140½ high. For ordinary purposes a mixture of 1:2:4:4 pebbles and stone, with first-class Rosendale composition, used by competent hands, ought to stand ten days after depositing a load of 16 to 20 tons per square foot. For practice the following conclusions are arrived at: A correctly proportioned concrete has fully as much strength as the cement mortar used in mixing it.

By diminishing the ballast below the calculated quantity the cost of the concrete is increased without benefit to the strength. Strength increases for seven months and over by 30 to 40 per cent concreted with weakest mortar; start low but catch up considerably in time.

Municipal Building Laws.*

BY GEO. A. FREDERICK, F. A. I. A., OF BALTIMORE, MD.

THAT some laws relative to building are of very ancient date, showing that at all times the preservation, as also the protection of neighboring property, was a matter of popular importance, we have ample evidence. One of the most familiar to all is probably the "curfew" bell, which, ringing at a fixed hour every evening, advised the people to put out or protect their fires. This custom, brought to England from the continent by William the Conqueror, is said still to live, at least to the extent of the bell ringing in some districts; but, specially digested and combined laws, relative to the constructions of buildings are of comparatively recent date; those of European cities, while earlier than ours, date back scarce more than a generation. The London "Building Act," as it is technically called, was only established in 1844, copiously amended in 1855, and was probably the first comprehensive legal instrument designed to contain within itself the requisite elements of safety and preservation.

In this brief paper I do not purpose to touch upon municipal regulations as to building lines, projections beyond, or encroachments thereon, but to confine myself to the structural element itself.

Most of the leading cities of the United States have in the past decade sought to establish laws governing the erection of buildings within their boundaries; disjointed and scattered laws, having reference to some special materials prohibited, constructions condemned, or sanitary features to be enforced, exist in almost all localities; all of these contain undoubtedly many good features, are a step in the right direction, but my observation leads me to believe that but few cities possess a well-digested, practical law, subjecting their citizens to no useless, or, rather, unnecessary expenditures, and confined strictly to the essential requirements such as justice demands should alone be enforced.

What are the essential requirements—what the important conditions which he who builds, owes not only to himself, but also to his neighbor, to his fellow man; which in justice can be demanded, nor more, nor less than which should be the *sine qua non*?

Security of structure; hygiene, or sanitation of surroundings.

Security of structure must embrace not only stability, but also reasonable safety against destruction from no external or internal causes, by reason of deterioration of materials, or by that more frequent and more destructive agent—fire.

Hygiene. In this respect every building should be so constructed as not only to be healthful and salubrious to those within, but in no wise to become a source of danger of contamination or injury to others.

The primary condition, that of security of structure, is a varying one, differing with the purposes of use to which the building is intended to be put. The latter, that of hygiene, is one which in principle remains the same for all.

The varying quality of the first problem makes in one respect its solution difficult. A building, for instance, may be erected for a specific purpose and be perfect for its special uses in every detail; from a variety of circumstances, such as are occurring at all times, it may, for this special use become unnecessary, and the owner compelled to look for other tenants; or it may be sold, and under either circumstance, its new uses be radically different from its previous ones. Again, do we not see daily, dwelling houses altered into shops or stores of various kinds, and cease to be dwellings or domestic structures in every sense? Under such continuous liability of change, it seems to me that all which can be asked is reasonable stability in the kind of building constructed; a concise declaration, strictly enforced, as to what materials can, and how or where they shall be used to construct a component whole, and a requirement, that in every building outside of such as are used for strictly domestic purposes, a legible notice shall be conspicuously posted on every floor, giving the safe carrying

*Paper read before the twenty-second annual convention of the American Institute of Architects at Buffalo, October 18, 1888.

capacity of said floor per square foot, loaded in the middle, and with reference to all concomitant circumstances, such as condition of walls, columns, or other supports, made and signed by a reputable and competent person of that state in which such building may be situated, and renewed at intervals of not more than five years.

Safeguards with reference to the prevention of fires on the interior, and to arrest their spread from contiguous causes on the exterior or interior, also claim attention. In this regard I believe it would be wise to enforce the thorough fireproofing of all structures of a height greater than 65 feet. All buildings should have their roofs covered with some fireproof material, and all exterior cornices or decorations or constructional features above a height of 55 feet, to be similarly protected and finished. Provision should also be made for the use of steam boilers under fixed rules and requirements, as also for their chimneys. Also for the construction of fireplaces, flues (be they for the purpose of conducting heat or smoke), chimney breasts and chimneys in general.

Buildings should be classified into public or private. The former should embrace all churches, theaters, public halls or places of amusement. Court-rooms, schools, hospitals, asylums, office buildings or flats, hotels or tenement houses (above a certain fixed capacity) and manufactories employing more than a certain number of people. Stores, where manufacturing is combined with the business carried on, or buildings occupied by different tenants, the aggregate of whose employes would exceed the number as fixed upon, are also to be classed as factory buildings.

Private buildings would embrace smaller tenement houses, hotels, possibly, too, private schools and factories (limiting the number of occupants in the entire building), ware or storage houses, stores and dwellings.

For the former class, all elevator walls and stair halls should be inclosed, and their walls, floors and ceilings formed of some fireproof materials; the stairways should be incombustible. The stairways, their halls and exits should not only be direct, but more than ample in proportion to the maximum wants and the area of the space covered. A stairway, I think, should be provided for at least every 2,500 feet of floor space, and in places of amusement or in schools even in greater proportion. It has often occurred to me, that if in hotels a uniformly colored globe, say red or blue, was used in such corridors only upon which stairs are situated, the lights in the same to be kept brightly burning during all hours requiring artificial light, it would not only prove a good guide in times of emergency, but even on ordinary occasions, to the unfamiliar and bewildered wanderer, seeking for egress. Fire escapes, in addition, should be provided for all buildings not strictly fireproof and intended to accommodate anything beyond a comparatively small number (fixed) of persons.

All churches, theaters, public halls or places of amusement, schools, hospitals or asylums, offering more than an ordinary, limited and fixed accommodation should be required to stand isolated on at least three sides from adjacent buildings.

The admissibility of frame or wood-lined buildings, sheds, stables or other structures of kindred character and their restrictions, would, of course, form a part of such a law as we speak of, and be considered with reference to the locality and surroundings.

We now come to our second principal division, namely, hygiene, or sanitation. Probably the most thoroughly important element of this is the effective drainage of marshy, springy or low lying lands before they are built upon; and when the same, as is often the case, are below the level of the streets and require filling up, equally important is the character of the material used for filling. How often are not such lands the common dump for all the refuse of the surrounding district or city. Often piled with twenty or even thirty feet of reeking filth, and decaying vegetable matter of all kinds fermenting, festering and sending up their noisome gases for years through the habitations built on them, to breed typhoid, diphtheria and kindred diseases. After thorough drainage of the sub-soil, such low lying lands should be filled with proper materials, consisting of good earth, cinders or ashes, but not the latter mixed with kitchen refuse or street cleanings.

Proper provisions for the ventilation of all rooms or apartments should also be one of the requisites of the law, as also a fair amount of direct light. In some cities of Europe, Berlin for one, if I rightly remember, it is obligatory upon everyone building a dwelling, to leave a certain fixed proportion of the lot improved free from buildings of any kind. All cellars, as also foundations where no cellar exists, should be paved with some suitable material.

The thorough drainage of the yards, courts or areas is also important, and should claim attention.

Finally: The plumbing throughout should be required to be well done with substantial materials, thoroughly trapped and vented. The above remarks are only intended as general suggestions, and give the writer's view of this subject. Of one thing he feels certain, that a building law to be successful, and thus beneficial, must be as simple and plain as it is possible to make it, and should only exact, and that in the most economical manner, what is absolutely requisite for the general welfare of all.

A RAGE for monumental statuary seems to pervade Italy. A certain Arturo Collanti complains in the public press of what he calls the "stone malady," which insists on erecting memorials in all parts of the peninsula, not only to "all its great men and all its half great men, but to its small men as well." Victor Emmanuel, Cavour, Garibaldi and Mazzini gaze with stony eyes upon the traveler at every turn. Outside of Naples and Rome there are forty-eight statues in Italy to these four heroes alone, of an aggregate value exceeding three million dollars. So active is this industry that in the town of Novara, Piedmont, no less than three new statues were unveiled on a single Sunday. If the monuments now projected should all be executed, the Italian sculptors, good, bad and indifferent, would all have their hands full to the end of the present century. At this rate Italy bids fair soon to become a vast gallery of statues from one end to the other, and it will be easier far to find a statue than to remember whom it is to commemorate and what for.

Western New York State Association.

THE second annual convention of the Western New York State Association of Architects was held at Buffalo, October 16. The meeting was most representative in character.

The meeting was called to order at 3:40 P.M. by President James G. Cutler, of Rochester. Secretary W. W. Carlin then called the roll, as follows (an * designating those not present):

Charter Members: Otto Block, Rochester; *E. M. Buell, Syracuse; Robert A. Bethune, Buffalo; H. C. Burdett, Buffalo; James G. Cutler, Rochester; Chas. F. Crandall, Rochester; E. A. Curtis, Fredonia; H. L. Campbell, Buffalo; O. W. Dryer, Rochester; Jay Fay, Rochester; John Falkner, Buffalo; *J. W. Griffin, Watertown; *John Hose, Watertown; J. P. Johnston, Ogdensburg; *D. D. Kieff, Watertown; J. H. Kirby, Syracuse; Asa L. Merrick, Syracuse; Geo. J. Metzger, Buffalo; *C. Francis Osborne, Ithaca; Cyrus K. Porter, Buffalo; Jesse R. Porter, Buffalo; *W. H. Richardson, Rochester; Wm. C. Walker, Rochester; Geo. W. Baxter, Syracuse; Louise Bethune, Buffalo; *Joseph Blaby, Palmyra; *Thomas Birt, Utica; J. R. Church, Rochester; Chas. E. Colton, Syracuse; W. W. Carlin, Buffalo; *G. Edwin Cooper, Utica; *Otis Dockstader, Elmira; Orlando K. Foote, Rochester; Fred H. Gouge, Utica; Ellis G. Hall, Syracuse; *J. Q. Ingham, Elmira; Edward A. Kent, Buffalo; W. Foster Kelly, Rochester; T. I. Lacey, Binghamton; J. H. Marling, Buffalo; Thomas Nolan, Rochester; J. H. Pierce, Elmira; Chas. R. Percival, Buffalo; Louis P. Rodgers, Rochester; James A. Randall, Syracuse; W. S. Wicks, Buffalo; J. M. Elliot, Syracuse; Noah Dillenbeck, Syracuse; B. T. Lacey, Binghamton; Wm. H. Archer, Fredonia.

Honorary Members: R. C. McLean, editor INLAND ARCHITECT, Chicago, Ill.; *Prof. Chas. Babcock, of Cornell University, Ithaca, N. Y.; *Chancellor C. N. Sims, of Syracuse University, Syracuse, N. Y.; *H. N. White, Syracuse, N. Y.; *Prof. George F. Comfort, of Syracuse University, Syracuse, N. Y.

President Cutler then addressed the convention, as follows:

GENTLEMEN,—You are all aware of the fact that the American Institute of Architects, the oldest organized society of our profession in the country, and of which a number of us are members, holds its twenty-second annual convention in this city tomorrow and days following.

In its proper place you will receive the invitation extended by the Institute to the members of the society to remain as spectators and guests during the convention, and to participate in the hospitalities which are to be extended by the architects of Buffalo to both associations.

Owing to this conjunction of meetings the Executive Committee, in arranging for our own, has thought best to attempt nothing more than the routine which an annual meeting involves, the consideration of reports and the election of officers for another year.

Since I had the honor of addressing you at the opening of our interesting and profitable meeting in Syracuse, the society has visited Cornell University upon the invitation of President Adams, and was most hospitably entertained at dinner and otherwise by Profs. Babcock and Osborn, and although, owing to the fact that this excursion took place at the height of the building season, the attendance was not as large as the very great interest of the occasion would have justified, it was felt that the meeting showed a warm interest on the part of the profession in architectural education, and that it did much to strengthen the esteem in which the admirable architectural department of Cornell University is held by the profession in this part of the state. Thoroughly practical, tending always to make the student familiar with the real problems in design and construction, and to develop individual strength rather than conformity to an artificial standard, in charge of instructors of marked ability and enthusiastic in their work, the architectural department of Cornell University, with its grand library and collection of photographs and models, is doing a great and growing work.

As architects, we shall all enjoy the privilege of spending some time in a city whose recent architecture is so admirable and where so many interesting works are to be seen. The building in which we are assembled and which is conspicuous for its beauty and fitness, on a site almost unique, is not less remarkable as the outcome of a successful competition; it is the work of Mr. Eidlitz, of New York.

The State Insane Asylum is by Richardson, though perhaps not in his best vein. St. Paul's Church, by Upjohn, has long been to my mind a model of ecclesiastical design. It is now undergoing restoration after the fire—and is even in the present state an object of great interest.

Buffalo is also remarkable and interesting to an architect for its beautiful houses, and in these as in other recent work, the ability of many of our own Buffalo members is conspicuous. I could extend my remarks very greatly without mentioning more than a very small proportion of the buildings which will challenge your attention and admiration.

In conclusion, I congratulate you on the act that the association comes to its first annual meeting without even a suspicion of dissension, ready, I believe, to enter upon a long life of usefulness. Let us never forget that "the objects of the association are to unite in fellowship the architects of western New York to combine their efforts to promote the artistic, scientific and practical efficiency of the profession and to cultivate and encourage the study of kindred arts," and each do his part in sustaining and advancing the work of the society on these lines.

President Cutler: Mr. Sidney Smith, the well-known architect of Omaha, and president of the Western Association of Architects, the National Association, of which this society is also a member, is with us, and has kindly consented to say a few words to the convention. I have the pleasure of introducing Mr. Smith, of Omaha.

Mr. Smith: Gentlemen, I wish I could add ladies, but I hope the day is not very far distant when I can add that to it. Your president has done me a very great honor in introducing me to a gathering of this kind, and I feel very much gratified at meeting so many in a state association. We have state associations in several of our western states, where the utmost number we can usually get together is ten—a dozen would be a large gathering—and it is doubly interesting to me to meet you here. We are on the eve of two very important meetings, I refer to the American Institute and the Western Association of Architects, at which, I believe, a very large amount of important business will be transacted. The success of these meetings depend largely upon the efforts of the state association in carrying them out, and it would not become me to take much of your time in discussing them now, as the time is so short, when I hope the most of you will become aware of what we are; but upon the state associations the other associations are relying for the success of all their undertakings. The success of all general associations depends entirely upon the success of the parent, and one of the children we hope to see is the formation of a national institute. If by any means we can animate the Western Association with the spirit of its own parent, the national institute, and it should become a national necessity, with the number of children that they have in every state in the shape of state associations, to work with and to be amused by, I think the prospects for the future of the architects in this country would be much more flattering than it is today, as we are under so many disadvantages, ignored as a profession by a great many other

professions—the legal fraternity in particular—and it is now high time that we should have some legal standing in this country. If the public expect to be protected just as they expect and want some man to bear the blame for whatever shortcomings may occur, we should certainly ask the same protection from the public, and the only way to accomplish that, in my mind, is to secure state legislation or some similar act. The associations, themselves, certainly might take the initiative step in legalizing our profession, by examination if you will, or by any means which the associations choose to adopt that will place a man in sufficient standing as an architect before he is entitled to hang out his shingle; by that time we may reasonably hope for something else; but, until then, I see no help, no protection, except the rule of each man for himself. At this meeting I sincerely hope something will be undertaken looking to this end. I won't detain you from your further duties. (Applause.)

President Cutler: I am sure we have all listened with great pleasure to the words of Mr. Smith, and are much pleased to have him with us at this time. We will now proceed with the regular order of business.

Treasurer C. E. Colton read his report, which showed a good financial condition. The report was referred to an auditing committee, consisting of R. A. Bethune, J. H. Kirby and A. H. Johnston.

Secretary Carlin then read the minutes of the last meeting of the association held at Syracuse, N. Y., beginning February 7, 1888. The minutes were approved as read.

Secretary Carlin next read the report of the Executive Committee.

Mr. Pierce, of Elmira, moved that the report be referred to a special committee of three.

Motion seconded and carried.

Report referred to a committee consisting of Mr. Kent, of Buffalo; Mr. Nolan, of Rochester, and Mr. Gouge, of Utica.

Secretary Carlin then read telegrams and letters of regret from absentees; also a communication from Secretary Bloor, of the American Institute of Architects, which read as follows:

MY DEAR SIR,—It is with great pleasure that, in behalf of the trustees of this Institute, I invite all members of your association to be present at the twenty-second annual convention of this Institute, to be opened in Buffalo on the 17th instant.

I should like to say that this invitation is also extended on behalf of the architects of Buffalo to remain over the three succeeding days and take part in the exercises of the Institute, and also in the entertainment which has been provided, not alone for the members of the Institute, but jointly with the members of the New York State Association. It was not deemed expedient by our local committee to entertain two bodies on days so closely coinciding. I wish it distinctly understood that this entertainment has been just as freely provided for the members of this association, and they are just as much a part of the body to be entertained as the members of the American Institute.

The invitations from the Institute and from the Buffalo architects were referred to a special committee.

The election of officers being in order, two nominating committees were appointed by the chair.

The chair appointed as a first committee: C. E. Colton, of Syracuse; J. H. Pierce, of Elmira, and T. I. Lacey, of Binghamton. As the second committee: E. A. Curtis, of Fredonia; W. S. Wicks, of Buffalo, and Otto Block, of Rochester.

Edward A. Kent: The committee appointed by the chair to consider the Executive Committee's report would like to move that the report be adopted as read and filed.

The motion was carried.

President Cutler: The nominating committees will please hand in their reports, and the chair will appoint as tellers Mr. Randall, of Syracuse, and Mr. Walker, of Rochester.

Mr. Colton, on behalf of the first nominating committee, reported the following ticket:

For president, James G. Cutler, Rochester; for secretary, W. W. Carlin, Buffalo; for treasurer, Otto Block, Rochester; for first vice-president, Frederick Gouge, Utica; for second vice-president, J. H. Kirby, Syracuse; for members of the executive committee, E. A. Curtis, of Fredonia, and Otis Dockstadter, of Elmira.

The second committee made the following report:

For president, James G. Cutler, of Rochester; for secretary, W. W. Carlin, Buffalo; for treasurer, C. E. Colton, Syracuse; for first vice-president, C. K. Porter, Buffalo; for second vice-president, O. K. Foote, Rochester; for members of executive committee, T. I. Lacey, Binghamton, and L. P. Rogers, Rochester.

Mr. Colton, of Syracuse: While I don't think the honors of this association should go begging, I think an important office like that of treasurer should be held by some one who has more time, and is equally qualified for the office with myself, and I would like to withdraw my name unqualifiedly, and in some way have another name substituted in that report. I fear my time will be very much engaged this next year—perhaps a little more, even, than some of the other members of the association—and I will be more or less employed by a commission in which my time will not be altogether my own, and I hope it will be the sense of the convention to vote for Mr. Block, of Rochester, if my name is not dropped.

President Cutler: I don't see that Mr. Colton has any remedy but to put himself into the hands of the meeting. I think it ought to be strictly understood that the work of these nominating committees is not necessarily final. I don't see why this meeting should not listen to any other nominations any one chooses to make, or that any one should limit his ballot to any of the names put up.

Mr. Curtis, of Fredonia: I move that the secretary be directed to cast the ballot of the convention for Mr. Cutler as president.

The motion was carried.

Mr. T. I. Lacey: I move that the president be directed to cast the ballot of the convention in favor of Mr. Carlin as secretary.

President Cutler: I put this motion with great pleasure. Certainly no one has so well served the interests of the association or had them so much at heart as Mr. Carlin.

The motion was carried unanimously.

Mr. Block, of Rochester: I heard Mr. Colton mention my name, but I was not here when the first list of officers was read off. I hope everybody will vote for Mr. Colton, as he has performed the duties of the office

of treasurer so well. If I had had a chance to put in my say first, I think I would have forced Mr. Colton right in.

Mr. Walker: The whole number of votes cast for the office of treasurer is 29, of which Mr. Block receives 22 and Mr. Colton 7.

Mr. Block was declared duly elected.

Mr. Walker: The whole number of votes cast for first vice-president is 29, of which Mr. Gouge has 17 and Mr. Porter 12.

Mr. Gouge was declared elected.

Mr. Walker: The whole number of votes cast for second vice-president is 29, of which Mr. Kirby has 20 and Mr. Foote 9.

Mr. Kirby was declared elected.

Mr. Walker: The whole number of votes cast for members of the Executive Committee is 57, of which Mr. Curtis has 16, Mr. Lacey 14, Mr. Rogers 13, Mr. Dockstadter 12 and Mr. Pierce 2.

President Cutler: Mr. Curtis and Mr. Lacey are declared elected.

Mr. Bethune: I move the adoption of the treasurer's report and the discharge of the committee.

The motion seconded and carried.

The report of the committee upon official publication of current matters regarding the association, of interest to members, recommended the acceptance of the offer of the *Architectural Era*, which would devote a page or more to the use of the association each month.

Mr. Porter: I move the adoption of the report of the committee, with the understanding that the secretary of the association be the editor; then everything would at least come through one of the Executive Committee, and there would be nothing that would be detrimental to the association.

The motion was seconded and carried, and Mr. Carlin was made editor of association matter.

Mr. Kent: The Committee on Competition, after considerable discussion on the matter, came to the conclusion that the wisest thing to do was to suggest the adoption of the report of the Western Association, in that it embodied all the important points, and we ask the association to adopt that report. As to this report, individually, there are some minor points that we would be glad to have seen changed; but we consider the desirability of unity in action in a matter like this should override any personal preferences. We think our report is sufficiently comprehensive to cover the important points—most of the important points—and we therefore suggest that the Western New York Association adopt the Western Association for competition intact. That code I desire to read—the code of the Western Association begins on the fourth line of the second page, "Competition be conducted under the following code."

The secretary read the code adopted by the Western Association at the St. Louis convention.

Mr. Colton: It seems to me that it is pretty late to enter into an argument or discussion into the merits of this report. As far as I am concerned, personally, if the rest of the members want to vote on the adoption of this code, I am perfectly willing; but it seems to me that it would be well to leave that for a later meeting, and give us all time to familiarize ourselves with it. If it is to be discussed and decided point by point, certainly we have not got time to do it tonight. I simply make the suggestion that it wouldn't be proper. I don't make that motion.

After a long discussion, the report was tabled, to be taken up at the February meeting, and, meanwhile, the members of the association resolved to enter into none but paid competitions.

The meeting closed with a vote of thanks to the American Institute for a cordial invitation to attend the meetings of that association, and to the trustees of the Buffalo Library Association for the use of the convention hall.

On motion of Mr. Walker, the next meeting of the Association will be held at Rochester, first Tuesday in February. The meeting then adjourned.

Association Notes.

CHICAGO ARCHITECTURAL SKETCH CLUB.

The regular meeting of the Chicago Architectural Sketch Club was held October 8, President Beaumont in the chair.

The communication from the New York Architectural League Exhibit was read by the secretary, which invited members to send drawings to that exhibit.

On motion, the president appointed a committee of six to receive, adjudicate and hang drawings at the coming exhibit of the club, consisting of W. G. Williamson, F. L. Linden, C. A. Kessell, T. O. Fraenkel, W. B. Mundie and E. J. Wagner.

On motion, the president appointed a banquet committee, consisting of E. J. Wagner, C. A. Kessell and George Beaumont.

H. L. Gay was made an honorary member of the club.

At the regular meeting of the club, October 22, W. B. Mundie read a paper on originality in design, which was well received and generally discussed. It will be printed in the November issue of THE INLAND ARCHITECT.

The following circular letter has been issued to members by Secretary Williamson:

To the members of the C. A. S. C.

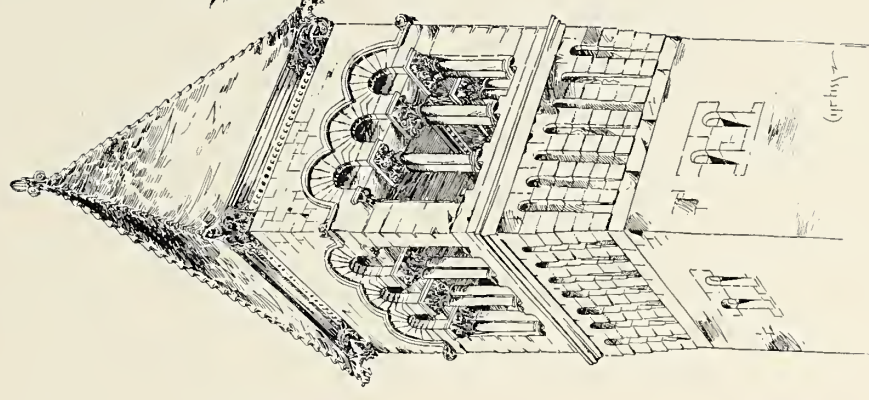
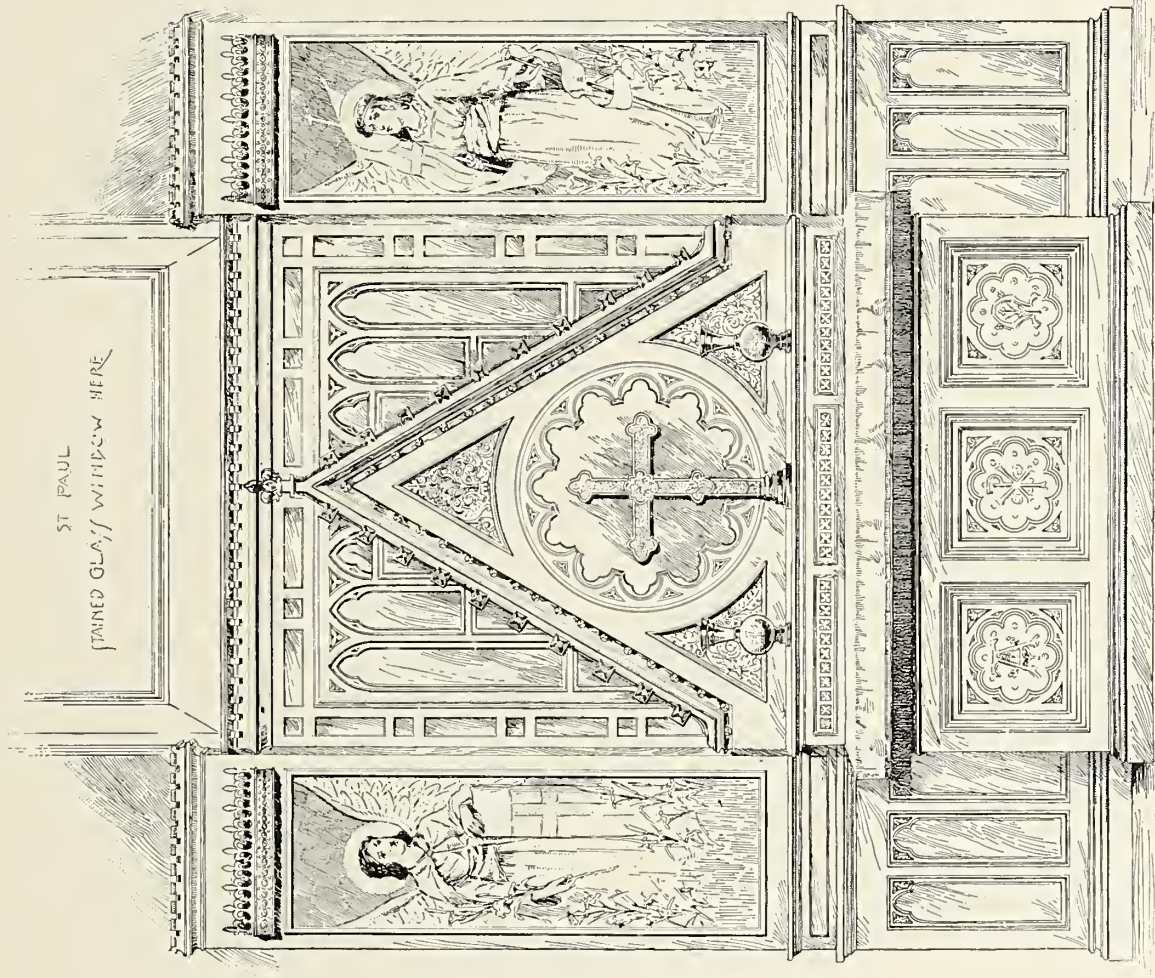
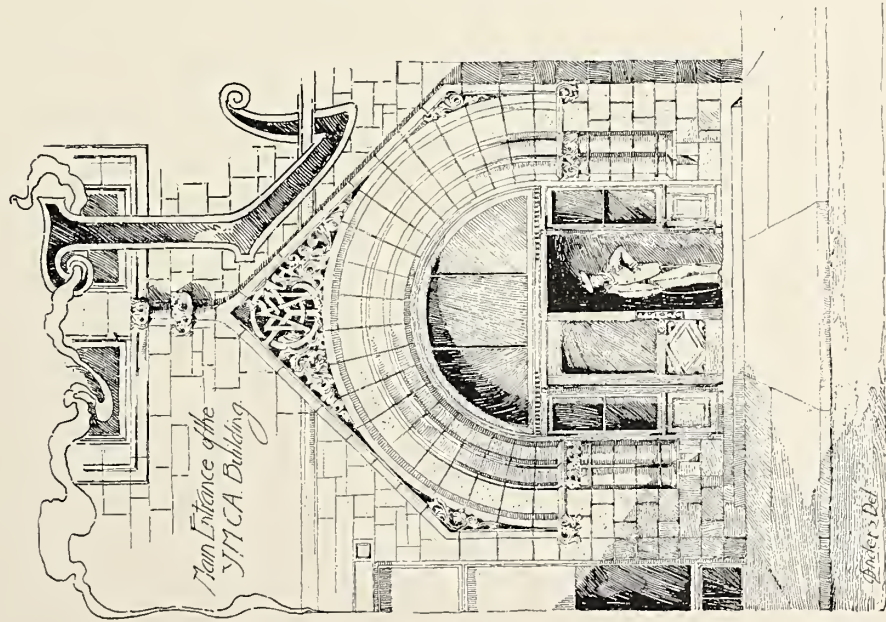
CHICAGO, October 15, 1888.

The committee on exhibit are desirous of securing a large number of drawings, and hope that the members will submit their portfolios to the committee on or before Saturday, November 10, at club rooms. Drawings can be framed or mounted on cardboard. This is not required of pen and ink sketches. Send one sketch if nothing more. You can lighten the work of the committee by bringing your drawings promptly. It is not necessary that they be architectural, as landscape, figures, details, etc., will be accepted. Copies will be excluded. The honorary members will receive their invitation to the banquet in due season, and will confer a favor on the committee by an immediate reply to the same. Senior, junior and honorary members are exempt from any special assessment for the banquet. The next meeting of the club will be Monday evening, October 22. Mr. W. B. Mundie will read a paper on "Originality in Design." Competition for "House Doorway" closes at this meeting. The following meeting (November 5) will be the annual business meeting, devoted to the election of officers.

Yours truly,

W. G. WILLIAMSON,

Secretary C. A. S. C.



Twenty-second Annual Convention of the American Institute of Architects.

HELD AT BUFFALO, N. Y., OCTOBER 17, 18 AND 19, 1888.

FIRST DAY—MORNING SESSION.

THE Convention was held in the assembly hall of the Buffalo Library. It was called to order by President R. M. Hunt, of New York, who took the chair; Secretary A. J. Bloor, of New York, and about sixty members of the American Institute of Architects, being present. The president delivered the following address:

PRESIDENT'S ADDRESS.

Fellows and Associates of the American Institute of Architects:

When I consider the duties and responsibilities of the position which you have conferred upon me, and recall to mind the ability of my predecessors, it is with feelings of gratification and solicitude that I address you upon this occasion.

I beg you to accept my sincere thanks for the honor done me, and, relying upon your indulgence, will submit a few suggestions for your consideration.

But first it is my painful duty to record the loss of our late president, Thomas U. Walter, whose absence at our last convention was noted with profound regret. Mr. Walter was a man of sterling qualities, well fitted to carry out the many important works intrusted to his care. As one of the founders of this Institute he was ever diligent in furthering its aims, while his great experience, sound judgment, and genial manner endeared him to us all. To no one is the Institute more deeply indebted. The nation, too, owes him a debt of gratitude for the grand monuments from his hand which adorn the capitol. His was a noble example of a life devoted to high professional achievements, even to the sacrifice of personal interests; and let us hope that his claim now before congress will be considered in the same conscientious manner as his services were rendered.

We have, furthermore, to deplore the loss of John H. Sturgis and Carl Pfeiffer, fellows of the Institute, and among its most zealous supporters, whose works testify to their uncommon ability.

During the past year much has been done to elevate the standing of the profession. The many public and private structures throughout the land show marked improvement in design and construction, attesting not only the earnest zeal of the architect, but also the deep interest taken by the public in our art.

The higher culture of the public in matters of taste and art has led to certain improvements in that much-vexed question of competition.

It is already not unusual to solicit professional aid in these matters, to lay down the rules and award the prizes, so that all that is now required to insure its universal practice is the adhesion of the profession to those principles of self-respect which preclude the practitioner from taking part in any competition not properly organized.

This condition of affairs is due in part, also, to the stand taken for years past by certain members of the profession who have uniformly declined to respond to invitations to compete, except on proper terms. Such action must eventually command the respect of the public, and ultimately secure the desired end.

An unfortunate event of recent occurrence affords convincing proof, if any were needed, of the necessity of the employment of a clerk of the works on structures of importance, undertaken at distant points. The extra cost of a superintendent is trivial as compared with the risk attending the erection of a building where only an occasional supervision is given. A firm stand on this point would undoubtedly insure the employment of a clerk of the works, as is usual in Europe.

It is to be regretted that no signal success has been gained, during the past year, toward the much needed improvement of the method followed by the federal government in the design and erection of the public buildings. It would seem as though the mere fact of calling attention to the present method would insure a total re-organization of this department where so many millions are yearly expended. The wonder is that any person of good professional standing should accept the position of supervising architect, so absurd is it to expect any one man—be he ever so gifted—to properly fulfill the varied requirements of that office. Besides, the nation has a right to expect that the public buildings should at least be fair examples of the architectural talent of the country, while the profession has no less a right to the government patronage.

The establishment of a department of public works, as exists in other countries, would remedy existing evil.

A standard form of contract—a great desideratum—has been prepared by your committee appointed for that purpose at the last convention to act in conjunction with similar committees of the Western Association of Architects, and the National Association of Builders.

Among other benefits secured by the introduction of a uniform contract is that of diminishing the chances of misunderstandings arising between the owner and the contractor, and possible consequent litigation.

At the last convention your attention was called to the desirability of members furnishing all the information possible to the Board of Trustees concerning candidates proposed for admission to the Institute. Too great care cannot be exercised in this matter, as with increased membership our responsibilities multiply.

Another important matter which demands your attention is that proper compensation should be provided for the executive officer of the Institute, the secretary, whose duties, already very onerous, are daily becoming more so.

The reduction of the annual dues a few years since increased our financial difficulties. Might it not be advisable, therefore, under the circumstances, to augment the initiation fee and annual dues of the fellows and associates, and might it not be wise to require that all members of the Institute shall be members of some of its chapters, thereby strengthening the chapters and equalizing, while diminishing, the burden on individual members?

Let us now consider briefly the present condition of the profession, noting what has been accomplished, and what remains for us to do.

Since the foundation of the Institute in 1857, the standing of the profession has greatly improved. This is due in a great measure, if not chiefly, to the establishment of that good-fellowship among its members, which has led to professional esteem and healthy rivalry in place of a certain distrust formerly existing among members of the profession personally unacquainted with each other. If no other result had been accomplished, we should have reason to congratulate ourselves.

The establishment of mutual respect and personal consideration among the members of the profession has led to the following, among other benefits, to the community and to the profession, namely:

Progress in architecture, its cognate arts and industries.

The establishment of a proper schedule of charges and improvements in the building laws.

While the growing interest in architecture, shown by individuals and corporations, has led to art publications and the establishment of technological and art schools.

Still much remains to be done to secure for our noble profession that high position which it justly holds in the Old World.

Toward this end, it is of paramount importance that all the architectural societies of the country should be under one direction.

The old adage, "In unity there is strength," is especially applicable to us.

Our united efforts to reorganize the government method in regard to public buildings should be unceasing until crowned with success.

A bill "To establish a national art commission," to report on plans of public buildings, monuments and works of art, has passed the senate and is now before the house of representatives; it is hoped that it may become a law.

A similar commission should be established in every community to insure correct designs and good construction.

A striking proof of the necessity of such a board is furnished by the present chaotic state of the proposed library at Washington. The capitol at Albany furnished another example.

Such condition of affairs would hardly have been possible had these buildings, from the start, been intrusted to a competent commission, comprising one or more experienced men of our profession.

Striking blunders of this sort are of too common occurrence—of buildings costing double the amount proposed to be expended, others unfit oftentimes for their intended

use, etc., and although the architect is not infrequently blamed for those mistakes, the fault generally is attributable to the incompetency of the committee in charge.

The attainment of these two objects is of the greatest importance, and we should do all in our power to accomplish them. It is a duty we owe to the public, who should be ever ready to give us aid and support, and who should rightfully expect us to direct in matters relating to our craft.

A more direct and lively interest should be taken by the profession in the architectural and technical schools, which have already attained to a high degree of excellence under the able direction of those in charge of them.

Lectures and conferences by the active members of the profession might accomplish much in the training of those who so soon are to take our places.

In conclusion, we have reason to be satisfied with the results of your past labors.

Let us, therefore, take renewed courage and steadfastly pursue our good work, each and every member remaining loyal to our motto "Truth and Unity."

The secretary, Mr. A. J. Bloor, of New York, then read the twenty-second annual report of the Board of Trustees, which gave in detail the association work of the year. He was followed by the treasurer, Mr. O. P. Hatfield, of New York, who read his annual report, which showed the association to be in a good financial condition. It showed the available funds of the year to be \$1,975.88, the total disbursements \$1,738.17, leaving a balance in the treasury of \$326.21. The cost of publishing the proceedings of the last annual meeting was \$346.

On motion of Mr. Bloor, the report was referred to an auditing committee, consisting of L. T. Scofield, of Cleveland; J. G. Cutler, of Rochester, and Alfred Stone, of Providence.

A letter from Professor Comfort, of the College of Fine Arts in Syracuse, regarding architectural education, was then read by Secretary Bloor. The secretary then read the annual report of the Committee on Publications.

Mr. Kendall: I move that the report of chapters be referred to a special committee without reading them at present, so anything of importance may be presented to the Convention later, in order to save time.

The motion was presented and carried.

Secretary Bloor stated that Mr. Jenney had written some funny letters about the report of the secretary for foreign correspondence, but Mr. Roach had sent no report.

Secretary Bloor then read the report of the special committee on consolidation of architectural societies.

Mr. Stone, of Providence: I move that the report be referred to a special committee, to print so much of it as lays out a plan submitted, and that those papers be here upon our table tomorrow morning, or else be in our parlors at the Genesee this evening. It is not a long matter to print, and there is no way to consider it without having it in our hands.

Mr. Briggs, of Bridgeport: I move that we have a special meeting this evening at half-past eight to consider this most important matter.

Motion was seconded and carried.

The report of the special committee on bill to provide improved methods in the architectural service of the federal government was then read by Secretary Bloor, as follows:

REPORT OF SPECIAL COMMITTEE ON BILL TO PROVIDE IMPROVED METHODS IN THE ARCHITECTURAL SERVICE OF THE FEDERAL GOVERNMENT.

To the American Institute of Architects:

The undersigned committee, appointed to prepare a bill, in coöperation with the committee of the Western Association of Architects, to provide improved methods in the architectural service of the federal government, respectfully report:

That the said committee has consulted and coöperated with a committee of the Western Association, and that the committees, jointly meeting at the office of the Institute on April 19, 1888, agreed to the following bill:

A Bill to Regulate the Construction of United States Postoffices, Court Houses and Custom Houses under the control of the Secretary of the Treasury.

SECTION 1. Be it enacted by the people of the United States in congress assembled, that from and after the passage of this act, all bills for the construction of a public building, for postoffices, United States courts and custom houses, and for all other purposes connected therewith, costing \$50,000 or more, in the United States and territories, shall be subject to and governed by the provisions of this act, and all existing laws now in force and conflicting herewith are hereby repealed.

SEC. 2. The secretary of the treasury shall, immediately after the passage of this act, by the advice and consent of the president of the United States, appoint an architect of known ability and integrity, whose title of office shall be that of supervising architect of the United States Treasury Department, and whose compensation shall be \$6,000 per annum, and whose term of office shall be four years from the date of his appointment.

SEC. 3. It shall be required of the supervising architect, upon his taking the oath of office, that he shall be subject to existing laws governing other officers in the service of the United States requiring competent and faithful service, and shall at all times be subject to removal from office for cause.

SEC. 4. The secretary of the treasury shall, as soon as practicable after the passage of this act, cause to be provided suitable quarters, properly lighted, heated and ventilated, and with fireproof qualities, for the proper conduct of the supervising architect's bureau, and the sum of \$100,000 is hereby appropriated and made available from and after the passage of this act out of any moneys in the United States treasury not otherwise appropriated, to carry into effect this provision for the necessities of the supervising architect's bureau.

SEC. 5. It shall be the duty of the supervising architect to appoint, with the advice and consent of the secretary of the treasury, one assistant supervising architect, and such other assistants as the duties of the office, both in regard to design and construction, may require, and the sum total of whose compensation shall not exceed \$50,000 per annum, which sum is hereby appropriated and made available from and after the passage of this act, out of any moneys in the treasury of the United States not otherwise appropriated.

The duties of said officers shall be designated by the supervising architect, who shall select as such officers men of known integrity and of knowledge and experience fitting them for the special duties of the positions assigned to them.

SEC. 6. It shall be the duty of the supervising architect and the assistant supervising architect, together with the secretary of the treasury, to act as a board to carry to successful completion the construction of the buildings that are already, or that may be, authorized by law, including all alterations, additions and repairs, and which are under the charge of the treasury department; and the assistant supervising architect shall act as supervising architect in the absence of that official.

SEC. 7. It shall be the duty of the said board to formulate rules and regulations, which shall govern the supervising architect's office in its management, and which shall obtain public competition, after public advertisement, on all work and materials entering into the construction of said buildings, the alterations, additions and repairs to the same, including the purchase of all sites, the building proper, the approaches, and heating, plumbing, lighting and ventilating apparatuses; and said rules and regulations shall embrace suitable forms of contracts and bonds, and provide for the letting of all contracts to the lowest responsible bidder fully complying with the terms therein set forth, and which contracts in all cases shall be approved and signed by the secretary of the treasury and the supervising architect.

It shall be the duty of the supervising architect to furnish, at the expiration of each fiscal year, a full and complete report of all transactions of business in detail in the said department, together with the statistics of the public business, wherever the erection of a suitable building is required in any location in the United States and territories; and said statistics shall be accompanied by a recommendation from the supervising architect, in each case, as to whether it will be more economical for the government to purchase a site and erect thereon a suitable building, or to rent from private parties, suitable quarters

for proper transaction of the public business; and in each case where a recommendation shall be made in favor of the erection of a suitable building, the estimated cost of the site, and the cost of the building separately and expenditure on account thereof, shall accompany the said recommendation, which recommendation shall be transmitted to the secretary of the treasury, and by him furnished to the congress of the United States for its information.

SEC. 9. It shall be the duty of the supervising architect, together with the said board, to invite competition for the planning of all said buildings, which may be estimated to cost \$50,000, or in excess of that amount, which competition shall be confined to the architects of the United States; and all said competitions shall be governed by the rules and regulations formulated and approved by the said board, which rules and regulations shall give suitable time for the preparation of drawings and illustrations, and shall determine the premiums or other inducements to be offered to the competing architects. Upon the delivery of the competitive plans at the office of the supervising architect, the said board shall appoint a committee of four expert architects, who shall, with said board, consider the same, and the said board and committee shall, with the written approval of the post-master-general and attorney-general of the United States, select and adopt the best and most suitable plans, in their judgment, for the buildings; and the architect whose plans shall be thus selected and adopted, shall be appointed the architect and superintendent thereof, and shall continue in office during the construction of said building, unless removed by the supervising architect for cause, and shall receive as compensation in full for all such service the usual percentage paid to reputable architects in private practice, not to exceed in any case five per cent of the cost of the building, which, together with the expense of said competition shall be paid from the appropriation thereof.

If the author of the accepted design should not be, in the judgment of the board and committee, a person of sufficient artistic or constructive or administrative capacity, then an associate architect shall be appointed by said board, and the compensation of such associate shall be, in each case, determined by said board, and shall be deducted from that of the author of the accepted design.

SEC. 10. It shall be the duty of the supervising architect, together with the said board, in the selection of all sites and plans for new buildings contemplated by this act, to consider the future growth of the public business and to make suitable provisions for the same in both site and building, and they shall cause to be prepared and retained in the office of the supervising architect copies of all plans of buildings and plats of grounds, so that records may be available when required by the future growth of the necessities and business of the United States.

Your committee then decided to meet the committee of the Western Association at Washington, D. C., with the view of progressing said bill and making such further amendments and alterations as inspection of the working of the supervising architect's office might suggest.

On April 23, 1888, the two committees met, by sub-committees with power, in Washington.

Present, on behalf of the American Institute of Architects: A. J. Bloor, Emlin T. Littell. On behalf of the Western Association of Architects: J. F. Adler, J. F. Alexander.

The following day the two committees had prolonged interviews with Mr. Freret, Fellow A. I. A., supervising architect of the treasury department, who freely laid before them all the workings of his office and called attention to numerous changes with a view to improvement in methods which he had made, or hoped to accomplish, and also to a bill prepared by him and introduced in the house of representatives March 24, 1888, a copy of which is hereto appended.

Your committee, however, coincided with its co-laborer, that there was little hope of complete success in the architectural work of the government, especially on its artistic—that is its highest—side, from the constitution of the principal office, no matter how well administered by the present or other incumbent.

The result reached by the two committees was a unanimous agreement that the calendar of bills before congress was too crowded to allow any chance for a bill introduced during the remainder of the current session to be reached.

That any bill, to be favorably considered, must be general in its provisions, leaving the working out of the details in the hands of the department. That any bill must, to have a chance of enactment, be very moderate in its provisions, congress in its multitude of cares not having yet had the opportunity to give exhaustive study to the protection of the architectural interests of the United States.

That the above bill, while not perhaps as perfect as might be produced, is substantially drawn on the line of advance, and is as thorough as is likely at present to meet with favor from the careful legislator of today.

A. J. BLOOR,
R. G. HATFIELD,
E. T. LITTELL,
M. E. BELL,
LEVI T. SCOFIELD,
Committee.

The committee recommend that the above committee be retained for future action.

LEVI T. SCOFIELD,
ADOLF CLUSS,
AUGUSTUS EICHORN.

Appended to the above report of the Committee on Federal Architecture, was the following bill, with the prefixed report from the committee on Public Buildings and Grounds submitted by Mr. Dibble, March 24, 1888, read twice, referred to the house calendar, and ordered to be printed. Fiftyeth congress, first session, H. R. 8831.

The Committee on Public Buildings and Grounds, to which was referred a letter of the secretary of the treasury (House Ex. Doc. 196), transmitting a letter from the supervising architect, recommending legislation in regard to contingent expense for superintendence of public buildings in process of erection, has carefully considered the same, and in response thereto, respectfully submits the bill accompanying this report.

The maximum rates provided for by the bill, while liberal enough to meet all cases, will cause a very great saving in comparison with past expenditures for the purposes named.

It will also tend to expedite the work of construction, while a per-diem compensation for superintendence may tend in some cases to delay completion. If this bill become law, money cannot be paid for superintendence, except in proportion to the advance of the work, while at present a superintendent may receive his daily salary, although work may be temporarily suspended for a considerable time. An investigation will show that the principal reason why public buildings cost so much more than other buildings is because of unrestricted expenditures outside of the actual work of erection. For this evil the bill submitted provides, in part, a remedy.

The committee therefore recommends its passage.

A Bill Relating to Superintendence of Construction of Public Buildings.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in all buildings erected under the direction of the secretary of the treasury, he is hereby authorized and directed to cause to be set apart, from the moneys appropriated for each building, a superintendence fund for such building, from which fund alone, and from no other moneys whatsoever, shall be paid all expenses of superintendence of construction, including professional and clerical services, foreman, traveling expenses, examination and testing of materials, and all incidental expenses pertaining to the inspection and supervision of work, and reports thereon, but not including watchmen, when necessary; and the maximum amount of the said fund for each building shall be in proportion to the limit of cost of erection of such building, exclusive of the cost of site, as follows:

Five per cent of all sums appropriated for the erection of buildings limited in cost to \$50,000, or less;

Four and three-fourths per cent of all sums appropriated for the erection of buildings limited in cost to \$100,000, or less, but more than \$50,000;

Four and one-half per cent of all sums appropriated for the erection of buildings limited in cost to \$150,000, or less, but more than \$100,000;

Four and one-fourth per cent of all sums appropriated for the erection of buildings limited in cost to \$200,000, or less, but more than \$150,000;

Four per cent of all sums appropriated for the erection of buildings limited in cost to \$250,000, or less, but more than \$200,000;

Three and three-fourths per cent of all sums appropriated for the erection of buildings limited in cost to \$300,000, or less, but more than \$250,000;

Three and one-half per cent of all sums appropriated for the erection of buildings limited in cost to \$350,000, or less, but more than \$300,000;

Three and one-fourth per cent of all sums appropriated for the erection of buildings limited in cost to \$400,000, or less, but more than \$350,000;

Three per cent of all sums appropriated for the erection of buildings limited in cost to \$450,000, or less, but more than \$400,000;

Two and three-fourths per cent of all sums appropriated for the erection of buildings limited in cost to \$500,000, or less, but more than \$450,000;

Two and one-half per cent of all sums appropriated for the erection of buildings limited in cost to any sum exceeding \$500,000, or appropriated in excess of the limit of cost previously fixed by law, or where no limit of cost has been fixed by law: *Provided*, That where a building is in process of erection at the time of the passage of this act, then the sum to be so set apart shall be rated as aforesaid, in proportion to the balance remaining unexpended of the sum fixed by law as the limit of cost of such building, without reference to any expenditures for superintendence incurred prior to the passage of this act.

SEC. 2. That the total expenditures at any time from the superintendence fund of any building, when compared with the total expenditure at the same time in the construction of such building, shall never exceed the percentage prescribed for superintendence of construction of such building in section 1 of this act.

President Hunt: To interrupt the regular order of business, I now have the honor of presenting to you the Hon. Philip Becker, mayor of Buffalo, who will address you.

Mr. President and Ladies and Gentlemen: It is a pleasure to me to welcome you to the city of Buffalo. When I say I welcome you to the city of Buffalo, I mean that the citizens of Buffalo always welcome those who wish to hold their conventions here or visit or stay here, either for pleasure or for business. We have a small place, it only contains about forty square miles. We have less than five hundred miles of streets, but over four hundred and fifty miles. We have a great many sewers and a great many miles of street paving, probably three-quarters of the streets that are properly laid out are paved at present. We have a good system of street railroads, and the horses and the cars will average as well as any city in the Union. Now, you gentlemen have come here to see whether Buffalo, and whether there are any advantages here for you gentlemen to come here, to move to Buffalo, and to make Buffalo your home. We have also a small park which will be shown to you by our Buffalo architects and friends. We have also a Niagara river which furnishes the water, and probably will compare favorably with any other water. Sometimes it changes color, and it always makes a good drink, and your friends may be able to show in what way that water is changed in our river. I see you are in the hands of friends, and those friends will take great care of you, and I will say that it is due to you, gentlemen, that we have some fine buildings in Buffalo and other cities. If it wasn't for the architects, I think we would have the old log cabins today, and not the splendid edifices which have been erected within the last few years. I hope Buffalo architects will take charge of your proceedings here during your stay, and try to excel all others over the United States, so as to induce you to come here and live with us. Let me say again, I heartily welcome you to the city of Buffalo, and extend to you the hospitalities and freedom of the city, and may your stay be pleasant, so that when you have returned home you will say to yourselves Buffalo is a good place to hold conventions in; and come back and see us again. (Applause.)

President Hunt: In the name of the Institute I would express our thanks to you, and we extend to you a welcome to join us in our visit to Niagara Falls this afternoon if so inclined.

Mayor Becker: I should be glad to accept the invitation but for some important business I have to attend to. My time is not my own.

O. P. Hatfield, of New York, then read the report of the committee on a uniform building contract prepared jointly by the Institute, the Western Association of Architects, and the National Association of Builders. It is as follows:

REPORT OF COMMITTEE ON UNIFORM CONTRACTS.

To the Twenty-Second Annual Convention American Institute of Architects:

The undersigned Committee on Uniform Contracts, appointed at the twenty-first annual convention to confer with like committees from the Western Association of Architects and the National Association of Builders, beg leave to report as follows:

Early in the present year, through an extended correspondence with each other, your committee prepared and had printed a form of contract to serve as a suggestion to the other committees of what, according to the views of this committee, such a form might be. The correspondence then became general between the three committees, but principally between the chairman of your committee and the secretary of the National Association of Builders, in which body the movement for uniform contracts originated.

It was finally concluded to have a meeting of the committee at New York, and such a meeting took place at the rooms of the Institute, No. 18 Broadway, in that city, on June 6. There were present at this meeting, Messrs. Windrim, Stone and Hatfield of the Institute, Messrs. Treat and Clay of the Western Association of Architects, and Messrs. Stevens, Prussing and Tucker of the National Association of Builders. The secretary of the Builders' Association was also present, Mr. William H. Sayward. On motion of Mr. Stevens, a member of your committee was elected chairman, and Mr. Sayward, secretary of the joint committee.

The committee thus organized proceeded to discuss the subject that had brought them together, using the form already prepared by your committee as a basis, and continued their sessions through two days and one evening, until they had brought the form of contract sought for into a satisfactory shape, and then referred it to the chairman and secretary, as a sub-committee, to have it printed and again submitted to the members of the committee for their further consideration.

After a close scrutiny and a few alterations and amendments, the form was again sent to the press and adopted as so finally printed. An edition of sample copies amounting to 3,800, together with an explanatory circular, were then printed and distributed to the members of the three associations from which the committees emanated by their respective secretaries.

It was then determined by the joint committee that the best way to secure the integrity of the text, and to prevent alteration (except in writing), was to have it copyrighted; also, that after having fixed a schedule of prices for its sale, including therein a royalty payable to the committee, and amounting to a sufficient sum to defray the committee's expenses, its publication should be entrusted to a printing establishment of sufficient capacity and energy to supply the form to the profession and the public, and at the same time give it the requisite amount of advertising.

It was not supposed possible that the committee could control its text in any other way than by making a contract with its publisher, in the form of a license, which should carry a penalty of forfeiture for any unauthorized alteration of any of its clauses, and simply impossible to so control it, if the right of publication should be made general to the printers of the country, or to any considerable number of them.

The offer of a printing-house in Chicago, well known as publishers of an architectural journal, was considered as filling all the conditions required, and being favored by a majority of the committee, it was accepted, and the blanks are now being supplied by them at the prices agreed upon. As this action has been somewhat criticised, it is due to the committee to be permitted to make this explanation, and for them to state that they believe it to be the best that could have been made under the circumstances.

In regard to the value of the form itself, the committee are gratified to learn that it is being adopted by many of the most influential members of the profession and firms of architects in the country, and is considered as essentially impartial and fair for the interests of both the owners of buildings and the contractors for their erection. Although there is some difference of opinion as to the advisability of including in it some few of its phrases, it is still thought to be upon the whole a useful form, and one that will serve the needs of both architects and builders. As to the latter, it may be said that it will make their estimating much more simple and satisfactory if it should become a standard form, and at the same time contribute to a better understanding between all parties concerned.

To continue the control of the form thus created, it will be necessary for the respective associations from which the joint committee was appointed to make such committee a standing committee. Your committee, therefore, conclude by proposing the following resolution:

Resolved, That the Committee on Uniform Contracts be and it is hereby made a standing committee of the Institute.

Respectfully submitted,
(Signed) O. P. HATFIELD,
ALFRED STONE,
J. H. WINDRIM,
Committee on Uniform Contracts.

Secretary Bloor then read the report of the special committee on formula for chapter reports, also the report on providing a permanent

home for the Institute, and Mr. Kendall then read the report of the committee on indemnification of Mr. Bloor.

Mr. Briggs moved that the committee to consider these reports be appointed by the chair.

The motion was carried.

Mr. Adler, of Chicago: To deprive the election of officers of the Institute of the perfunctory character which it usually has, I move that two committees on nominations be appointed by the chair.

The motion was seconded and carried.

The chair appointed the following committees on nominations:

First committee: Messrs. E. L. Nickerson, of Providence; Sidney Smith, of Omaha; J. W. McLaughlin, of Cincinnati.

Second committee: Dankmar Adler, of Chicago; E. H. Kendall, of New York; Alfred Stone, of Providence.

The reports of the Board of Trustees and Chapters were referred to a committee consisting of George A. Frederick, of Baltimore; W. R. Briggs, of Bridgeport; W. W. Carlin, of Buffalo.

The report of the Committee on Consolidation of Architectural Societies was referred to a committee consisting of D. Adler, of Chicago; J. G. Cutler, of Rochester; Alfred Stone, of Providence.

All other reports were then referred to a committee consisting of Levi T. Scofield, of Cleveland; Adolph Cluss, of Washington; A. Eichhorn, of Orange, N. J.

Mr. Adler: Under the laws of the association I believe an associate cannot serve on any of the committees.

Mr. Bloor: We won't draw the lines too close. If that is the rule it ought to be changed.

President Hunt: In the place of Mr. Adler, of the second nominating committee, I will put Mr. Gay, of Chicago, and in the place of Mr. Adler on the committee on consolidation, Mr. Littell, of New York.

Mr. Carlin, of Buffalo, announced that the train for Niagara Falls would leave the Terrace station at 2:20 P.M., and all members having ladies were requested to bring them, and on motion, the convention then adjourned to meet again at 8:30 P.M.

FIRST DAY—EVENING SESSION.

The convention was called to order at 8:50 P.M., President Hunt in the chair, with a full attendance of members.

President Hunt: The business before the convention this evening is the report on the consolidation of architectural societies. Shall this report be read in full or shall we take it up in sections?

Mr. Stone: I move that the report be taken up in sections, beginning with the words, "The following are the items of the formula now submitted to your consideration and discussion."

The motion was seconded and carried.

The secretary read the first section.

Mr. Kendall: I move the adoption of this section as read.

Mr. Stone: I suppose we are taking this up at this time not finally to adopt it, but to get at the sense of the meeting.

Mr. Briggs: It seems to me it would be well in that connection to have a little discussion as to the advisability of adopting this. I should like to hear the opinions of the members in regard to adopting it.

Mr. Adler: To bring this matter before the meeting as a subject of discussion, I will present this resolution:

Resolved, That this convention deems a unification or federation of all the architectural associations of the United States a matter of extreme desirability and importance.

Mr. Stone: It is utterly impossible for us to adopt this at this session, as I understand it. It was for this reason that I thought we might run through this thing, and in the course of it bring out all discussion needed on the matter, and put the matter in some shape for another year. All we can do tonight is something of that kind, and before we get through with the discussion of all the clauses in here I think we shall arrive at the feeling regarding this report.

Mr. Littell: I understand this report was referred to a special committee, and in order that that committee can act wisely it ought to be made better informed of the views of all the members, and some informal discussion without any motion being made might be allowed for the purpose of informing the committee.

Mr. Briggs: It seems to me it is unnecessary to go into this matter in detail. We have a general idea what this report is in our own minds. If we can get a general discussion regarding this we will see what the members of our Institute will have to say about it. There are three elements which have got to enter into this from different sections of the country, and I think a little discussion from them will throw some light on this.

Mr. Kendall: I am not here to enter into a general discussion upon this matter, but I would like to hear what can be said upon the subject. I don't think all of us are prepared to say at once there should be a union. I know I am not yet so prepared.

Mr. Briggs: I would call upon Mr. Adler, a member of this committee, to express his views as to how the West feels with regard to consolidation.

Mr. Adler: I really can only speak for myself. The matter was brought before the Western Association of Architects by Mr. Burnham and myself, and two or three others who were in favor of this consolidation. There has been no more opportunity for discussing the matter before the Western Association than there has been before the Institute. The convention of the Western Association at Cincinnati took place about a month after the last convention of the Institute. The resolution creating the committee which has reported to you today was also presented to the Western Association and was there passed, and a committee was appointed, of which I have the honor to be a member, and our convention this year has not yet taken place. It will be in about a month from now, and until then we shall have no opportunity of learning what the sentiments of our people are. We are in precisely the same condition as you are. (I am somewhat in the position of Poo-Bah here.) Inasmuch as the convention of the Institute takes place a month sooner, it becomes almost a necessity for the Institute to take the initiative. I think it is but proper, and I don't think

the Institute will in any way be giving away any of its prerogatives or lessen the dignity of its position by discussing this matter and expressing its wishes before the Western Association had done so. If nothing is done this evening or at this convention of the Institute, then the Institute will have no opportunity of expressing its views until a year from now. Yet it may be that when the matter comes to be presented to the Western Association, the Western Association will also feel that it ought not to express an opinion as to whether it desires a consolidation until the Institute has said something about it. If we can't have a joint convention or conventions held simultaneously at least, one or the other body must express its preference first. I believe myself in the desirability of this unification. I believe that one large representative body of our profession will be more powerful for good than two or three small ones. I think for the present both these bodies, that is, both the Institute and the Western Association, possess a certain fictitious element of membership, that is, there are many of us who are members of both organizations. Well, some time or other some of us, perhaps all of us, will grow tired of that and will belong to only one organization, and should that ever be the case, there will be a certain rivalry between the two organizations that can only lead to unpleasant jealousies and bickerings, and, in any event, whether we are on a friendly footing or on one of enmity and jealousy and mutual distrust, no matter what it is, we shall be stronger tonight if we are both working in the same plane for the same purpose. We can work to better advantage if we meet as one body than as is shown this evening by the apparent hesitancy on our part to accept the action of the Western Association. It will be difficult for us to act in concert, each will be afraid of doing something which will not be followed by the other. For the present we are working on the same lines, our committees are in harmony and there has been no clashing, but still it is evident that we are not accomplishing all for the good of the profession that we might if we were united. Suppose circumstances do occur, as they have in the history of similar organizations, and as they are very apt to again, that misunderstandings arise and the harmony which now exists terminates; then suddenly the efforts of both organizations will be directed to the best means of injuring the other, instead of the best means of furthering the common interest. But if we unite we forestall that possibility, and we put ourselves in position to stand before the public at large, before our clients, and before the world, as one great organization. I think that particularly the American Institute, which was founded, as I understand, with the intention of becoming the representative organization of the architectural profession in America, should do all in its power to bring under one organization and one control all architectural associations that had been formed within the last few years. It is preëminently our duty as members of the American Institute to enlarge the scope of that Institute. I will say right here that, while as a member of the Western Association committee I have myself proposed that the name of the new federation shall be the American Institute of Architects, and while Mr. Burnham, who is a leading and influential member also of the Western Association, holds a similar view, I am not at all certain that we will be supported in that by a majority of our organization, though I think we can carry the day. I think if the unification is carried out it will be the one that passes here, but it certainly cannot be brought about unless the Institute as such shows a desire for bringing it about. I hope and trust that the action of the Institute this evening will be in favor of this consolidation.

Mr. Cutler: I should like to make this suggestion right here. It seems to me that unless we wish to reconsider the action which was taken at the last convention, it is a little late to ask whether the Institute is in favor of this consolidation. At the convention in Chicago a committee was appointed to report as to the best and speediest method of consolidating all the architectural societies of the United States, and to invite a similar committee of the Western Association to act with them. It seems to me by that action the Institute is definitely committed to a policy of consolidation, and all we have now to do is to consider this plan as submitted by this committee upon the lines on which this proposed consolidation is to be made.

Mr. Adler: In view of that suggestion of Mr. Cutler's, I think I will withdraw my motion.

President Hunt: In order to get the general views of the convention, perhaps some member of our eastern chapters will say something.

Mr. Frederick: I am in accord with what Mr. Adler has said. At the last meeting of the convention, and I think the subject was first broached in New York at the previous meeting of the convention, a desire was expressed by many members of the Institute that it would be a very good thing if a combination could be effected between the different architectural societies of the country. I have always held that view, and I hold it today just as firmly as I held it three years ago, and I think there is not a member of the Institute but is desirous to effect that consolidation if it can be effected to produce the results we all desire. I am not prepared and I have only hastily read the result of the labors of the committee. I, myself, would like to hear it discussed in a general manner. I think all the members of the Institute would like to hear a general discussion, that we are all anxious for the success of the purpose for which this committee was appointed, and I don't think there is a doubt but as to the best means of effecting it, I think the committee has done its work well, and it is only by having a discussion that we can arrive at whether what it has done meets the views of all the members. I am in favor of discussion.

Mr. Smith, of Omaha: It is somewhat unexpected for me to be called upon, in this association at all events. But my views of this association are carried out by what has been stated before, the absolute necessity to us of a combination of the associations of this country. As to the best means of doing it that is what I came here to learn tonight. I want to hear it discussed. I have a theory of my own which if it please you I will lay before you. My theory of it is this, a combination to be effected by whatever name you choose to call it, the National Institute, the American Institute, or anything of that sort. The objects of each of the associations are the same, we are endeavoring to do the best we can for the good of the profession. Now the discussion that has arisen and the questions which have been mooted as to the advisability or non-advisability of one thing or

the other are very good, but I think it might be made in this way: All the members to become fellows, and then those who have the confidence of their fellows to be elected to occupy a higher position, or a second grade, or a third grade, if you will, but those members who have spent their lives in the service of this country in architectural productions, and have the confidence of their fellow-men, should at least receive some recognition. It may not be many years before others will be able to take their places, and so on to the end. By that means we can avoid any sort of complaint that those members of the American Institute are justly entitled to make. I am already a member of the Institute. Why should I give up the honor I have already to become a member in a lower grade? I think by that means that might be avoided.

Mr. Cutler: I respectfully urge again that a discussion of this report by paragraphs will give us the very best light, and I therefore move that we now take up the consideration of this report, by paragraphs, and that a motion to adopt a paragraph shall be merely for the purpose of getting at the sense of this meeting, and not in any way hindering the Institute to any final action, or to confine the committee which will hereafter report upon the project of consolidation.

The motion was seconded and carried.

Secretary Bloor then read the first paragraph.

Mr. Stone: This first paragraph is the name by which this body has been known for years, and it is the name which should attach, I think, to the body which becomes the representative body of the architects of this country. Those of us who have been members of the Institute for the last fifteen or twenty years know how much we have been through, and I think the young members do not realize how much they owe to the very fact of the existence and the persistent keeping up of the American Institute of Architects. It has a name which has existed for just about a generation, and the standing of every man in the profession today is infinitely better for the fact that it has existed. I believe in retaining this venerable name, and I trust that the other organizations, whether they are known as chapters or as local associations, will be willing at least to have that name retained. It has in it a tower of strength, and if we retain it and keep it, it will for future generations have in it a greater tower of strength and it will be a greater help to those who come after, if possible, than it has been to those who have gone before and are now practicing architects. Let us not in our endeavor to improve our standing and position lose that which we now have which is good, but hold on to this good and press on to something better. Therefore, I move we consider that as the proper name for the central body.

The motion was seconded by Mr. Adler and carried unanimously.

The secretary then read the second paragraph.

Mr. Adler: The Western Association at its last convention adopted a method of determining the status of honorable practice of the profession by the applicants for membership, and I think it would be well if we were to add to the clause proposed by your committee a further clause which would make the latter part of the paragraph read thus: "The honorable and exclusive practice of the profession of architecture, the fact of such honorable practice being demonstrated in the manner provided for by the rules of the Western Association of Architects." But as it has fixed the standard of admission somewhat high, it is rather difficult sometimes to determine whether an alleged architect is engaged in the honorable practice of the profession, and I move that the latter part of the paragraph be amended so as to read as I have suggested. Those rules provide that the candidate shall submit to the Board of Directors of that association drawings or photographs of buildings erected under his care, together with statements from his clients for whom these buildings have been erected, stating that his services in connection with the erection of those buildings have been satisfactory, and, in addition to that, a statement from two members of the association vouching for him as an honorable practitioner.

Mr. Briggs: It seems to me that those words "The Western Association of Architects" should not be adopted, because if this was adopted there would be no Western Association of Architects.

Mr. Adler: There is, however, as yet, a Western Association, and this work is preliminary work, and whenever the consolidation shall have been effected, these rules can be incorporated in the section. I say this because it would be the time to incorporate in this resolution the form of application and rules of the Western Association.

Mr. Gibson, of New York: Is it intended that this clause in the recommendation of the committee should cover the possible applications for union on the part of any other association than the Western Association of Architects? We all understand that whatever rules and standards the Western Association has adopted will in the main be satisfactory to us, but it seems to me that this clause, in the recommendation of the committee, is one that might be interpreted to allow for the admission of minor societies to full membership in this Institute, some of which, perhaps, are not yet in existence. I should like to know if there is any existing society in view, and if the possibility of a future society taking advantage of that clause has been considered.

President Hunt: As the chair understands, any architectural association or it would allow the members of any architectural association to become members of this confederation.

Mr. Adler: And under the clause as I propose it to be amended, it would be any architectural association which has adopted a standard of membership at least as high as that now prevailing in the Institute, and as more definitely defined by recent action of the Western Association. It is not intended at all by the mentioning of the standard of membership of the Institute, or even of the Western Association, to confine membership to those bodies. The reference to the regulations of these two bodies is merely for the purpose of definition, so as to avoid in our present work a long and elaborate statement of the conditions of membership.

Mr. Gibson: The more definite the better, I think. The object of my question was to obtain an opinion as to the necessity of further definition.

President Hunt: The resolution, as offered by Mr. Adler, I understand, covers in general terms about everything that is contained in this condition of membership of the Western Association. I think that a few

words had better be put in a report of this sort, rather than adopt the whole form of the Western Association.

Mr. Adler: This will be considered by the joint committee.

Mr. Briggs: It seems to me in regard to the discussion we are now having in reference to this name, there is one thing we want to look at here, and that is that this American Institute has existed a third of a century. We have been very particular in regard to membership, and the organization itself has been a very honorable body, and has done an incalculable amount of good to the organizations of this country. Now, we propose to take in one or more organizations, and the largest organization has not been in existence over two years. We do not know how long they are to be in existence, and it seems to me it would be well to consider whether it is desirable to accept that organization or any organization as a whole. If any of the members of that organization wish to become members of the American Institute of Architects they have the right and the same method we have all pursued, and it seems to me that we can all consolidate that way and make it a stronger organization than we can in any other way. Now, we do not know who are in the Western Association. I do not wish to criticize them; they may be our peers in every sense, but they are now coming in as a body when it seems to me that any consolidation should be by the method we have all pursued. Let them come in as associate members of the old American Institute of Architects, and let us not take any organization in as a whole.

Mr. Adler: I wish to say on behalf of the Western Association of Architects most emphatically, that it does not as a body, or through any of its state organizations, or through any of its members individually, apply for membership in the American Institute of Architects. I wish to say that the Western Association of Architects was requested by resolution of the American Institute to appoint a committee to act with a similar committee of the American Institute, to devise ways and means for the unification of the different architectural associations of the United States, and it is in response to that request that I, as chairman of the committee appointed by the Western Association, have acted with the committee of the Institute. And I must protest against the assumption that we of the Western Association of Architects, as a body, or as individuals, are applying for membership in the Institute. We are fully able to stand on our own pins. We have a greater membership today than that of the Institute. Our conventions are attended by three times the number of members who attend the conventions of the Institute, and I think we have vitality enough to get along by ourselves.

Mr. Briggs: I do not think Mr. Adler's statement that the American Institute requested this consolidation is true. I do not understand it is so, nor do I wish to criticize, in any way, the Western Association. I don't doubt they can stand on their own bottom, but I say this is a very old and honorable institution as it is, and if the consolidation is desired, we can surely effect it individually. Now, Mr. Adler states that he has twice the membership of the American Institute, and if they should come in here they certainly would have the power to run things as they have a mind to. This body would go out of existence and be absorbed by the Western Association of Architects, and we would be absolutely blotted out of existence. They would have the power to do entirely as they chose.

Mr. Cutler: I think Mr. Briggs is very much in error. The Institute has certainly taken the initiative in this matter; appointed a committee, and requested the Western Association to proceed. If any member thinks that action ought to be reconsidered, that is very well, but it is too late now to raise any question as to whether or not this Institute is definitely committed by resolution to the speediest possible consolidation of all the architectural societies of the United States. I think Mr. Briggs is laboring under a misapprehension.

Mr. Stone: I was not present at the convention at Chicago, but, as I understand, Mr. Adler himself introduced a resolution here which proposes as a test of membership substantially what we already considered a test of membership; but thinking it was not quite high enough, he has added to it further conditions which are obtained from the Western Association of Architects, and he brings it in in this way simply, as he stated upon the floor, for the purpose of indicating the direction in which he wants this thing to move. And if we adopt his amendment here, concerning which I shall have a word to say before I get through,—if we adopt the amendment as suggested here, it is simply a direction to the committee which will have the final drawing up of the conditions of membership to this association, the combined conditions of the Western Association and the American Institute of Architects; and although those conditions of the Western Association I have not read, but, as I understand from Mr. Adler, they are more exacting and not quite so broad and open as those from the American Institute.

Mr. Adler: They seek to define a little more definitely what constitutes honorable practice.

Mr. Stone: There was one word in his amendment which struck me as being a little infelicitous, in this, that there are quite a number of professors of architecture in the country who cannot be considered practicing architects, but they are not like some members of the Institute who are now engaged in selling building materials or engaged in the trades. I refer to Mr. White, for instance, who cannot be considered eligible for membership here. But there are others whom we do not wish to exclude from membership. Therefore, I would like to have Mr. Adler's amendment worded that it would not exclude such men. As I understand him, we do not want men who are engaged in selling building materials, but we do want men who are architects, but not practicing architects.

Mr. Adler: In the Western Association we elect those men honorary members.

Mr. Stone: I should like to have them active members. I think, if we are going to try and work into the American Institute the architects of the country from the Pacific to the Atlantic, that we should do that which will go to bring them all in that are worthy practitioners, if that is what we are after.

Mr. Gibson: May I repeat the question which I asked a few minutes ago? Is it contemplated that any other association besides the Western Association of Architects will immediately share in this union?

President Hunt: The chair so understands it. It reads pretty plain English.

Mr. Gibson: The admission of the body of another association, with its whole list of members, is a very important matter. The rules and standards of the Western Association are and always would be perfectly satisfactory to the majority of the members of this Institute, but this clause will cover other associations which are not so satisfactory.

Mr. Briggs: That is my point exactly.

Mr. Adler: It admits any which has a standard of membership as high as that of the Western Association or of this association.

Mr. Briggs: How do we judge that standard of membership?

Mr. Adler: Because it is clearly so stated there.

Mr. Gibson: Since the Western Association seems to be the only one immediately under consideration, why not make the clause definitely to read that way, the American Institute of Architects and the Western Association of Architects, etc. Why not put it in that way until it can be separately considered as to the admission of any other association?

Mr. Cutler: The New York Architectural League was considered at Chicago, exclusively as one who might become members of the association.

Mr. Gibson: I don't understand that the standard of the League is any where near as high as that of the Western Association or American Institute.

Mr. Briggs: I do not think it is right to take them in as a body. Let us take them in as individuals. There may be objectionable members in the Architectural League and there may be objectionable members in the Western Association of Architects, men who, if put up as members in the Institute, would not be seconded by their own men.

Mr. Carlin: We have in the western part of this state not extending east of Utica, an organization of architects, numbering fifty, in which architects have been admitted to membership on the same standard as adopted by the Western Association. Is it fair to require of our members to come into this Association as individuals and the other associations come in as a body?

Mr. Cutler: The Western New York State Association of Architects is nothing more than a branch of the Western Association.

Mr. Carlin: I beg to call Mr. Cutler's attention to the fact that they may become so, but I do not understand that the Western Association delegates to the state association the power to elect members for it. We are organized under the rules of the Western Association of Architects, but I think it takes another election to become members of the Western Association.

Mr. Frederick: I would like to ask how many of the organizations of the Western Association of Architects have come in under the rules or regulations as defined by the circular referred to by Mr. Adler? If we have a criterion of this large membership, as to how many have complied with those rules and regulations, then we could judge better as to the advisability of the combination as a whole. I think now we are working somewhat in the dark, and I would like to hear some expressions on that subject.

Mr. Adler: The Western Association when it was formed, adopted in its constitution as a condition of membership the identical words used in the constitution of the American Institute, that is, that membership should be conditional upon the honorable practice and profession. This was very soon afterward amended to read thus: that the condition shall be the honorable and exclusive practice of the profession. Under the first clause, which was precisely the same as that of the American Institute, we received, I think, in the neighborhood of 120 members. Then under the amended clause, that is, the honorable and exclusive practice of the profession of architecture, under that we received the remainder of our present membership. The clause under which we are now working, and in which we more accurately define what constitutes the honorable practice of the profession, was only adopted at the last convention of the association. All our members as they stand now are admitted under a clause that is precisely the same as that of the Institute, and the remainder under the clause stating that the condition of membership shall be the honorable and exclusive practice of the profession.

Mr. Frederick: "This application for membership must be accompanied by photographs, and also by letters from the respective owners of the above buildings, and indorsed as to character and efficiency." There is no question in my mind, and I do not think there can be a question in the mind of any member here, as to that being a very thorough means of establishing a man's character, and I think any man making such an application, and bringing such proof as this paper calls for, would be entitled to very fair consideration, or more than a fair consideration, possibly. Mr. Adler says that has been only in vogue since the last convention. A very large membership in a very short space of time has been secured by the Western Association of Architects, and no man in the country feels more flattered by this fact than I do. Now, have the same means been taken, has the same care been exercised, not specifically in this paper, but in a practical way by inquiring as to the character and the work of the party applying for membership previous to the promulgation of this last clause? Were not many of the members of the Western Association of Architects taken in by convention in a body? I don't want to be misunderstood as casting any reflections upon the Western Association or any member of it, far be it from me. As I said before, I am glad of the existence of any association, society, or term it what you please, the end of which is for the improvement of the profession at large, and I believe that is the object of their association thus formed. But when associations of all kinds are in embryo, when they take head and form branch organizations, a natural enthusiasm is awakened among those who are interested. And may not this enthusiasm, which I am sure was great and strong since it has rolled up this large list of membership of which Mr. Adler speaks, may not that of itself have been the means of bringing in many members who today could not become members under this rule?

Mr. Adler: I will say in reference to this that all that Mr. Frederick says is true, that we did get quite a number of people admitted to the

ranks of the association who ought never to have been admitted, but I will say further, that as soon as this was discovered, means were taken to rid ourselves of these obnoxious elements, and as far as we have been able to discover their existence we have purged ourselves of them. Authority was given to the Board of Directors to drop from the lists of membership all whose professional standing was not such as to entitle them to consideration as architects engaged in the honorable and exclusive practice of their profession, and I know of quite a number whose names have been dropped on that account. It required no trials, no litigation; it was assumed that these people had come in under a misapprehension; the constitution of the association provided that only those fulfilling these conditions should become members, and it was assumed that the admission of these people was in error, and they were dropped without any fuss, and there were no protests; nothing was said about it. We were very glad to get rid of them, and they were very glad perhaps to get rid of us.

Mr. Shipman: At the organization of the Western Association of Architects there were quite a number who applied for membership and registered their names among the charter members who were afterward found not to be eligible under the constitution and by-laws then adopted. I myself made the motion to have the Board of Directors make an examination of all cases of membership there, and where it was discovered that they were not practicing architects that they were to be kindly and courteously advised of the fact that they were not eligible to membership, and I think that has been very generally followed out and no trouble has resulted from it.

Mr. Kendall: I think there ought not to be an open door left for a moment, but to make this a consolidation of those two bodies, and then later, let other bodies apply for membership to the body thus consolidated. The architectural league cannot come in by any means, because I think not more than one-third of that body are practicing their profession, and it seems to me that if consolidation is carried out at present it must be between these two associations—the Western Association and the American Institute.

Mr. Adler: I am sorry to take up so much time, but it seems to me as though it were a nobler object for us to endeavor to consolidate under one organization all architectural associations of the United States than merely these two. I do not think that we have the right to assume that only these two organizations, the Institute and the Western Association have formulated conditions of membership that maintain a high enough standard to make them component parts of the new organization that is to be formed. There may be others, and there may be those of whom we do not know. If there are only these two whose standard of membership is as high as that called for by this resolution, the others are excluded any way. But should there be two or three others who have a standard of membership as high as ours, or even a higher one, I think we want them; and in this connection I would like to say one more word about a matter that has been disposed of before, that is, that it should not be assumed by the members of the Institute that because it is proposed that the name of this federation which we propose to form shall be: "The American Institute of Architects," that therefore, the Western Association, or those other organizations of whose existence we are yet unaware, are applying for membership to this body. In proposing to name the federation of architectural associations, the formation of which is proposed by the report of the committee, "The American Institute of Architects," those who are not members of the American Institute recognize the value of the services rendered by it to the cause of the advancement of our profession, and we therefore voted to retain the name, thinking it is the wish of the old members of the Institute that that name be retained, and we only wish to share to an extent in the prestige of that name, but we are not desirous of becoming members of this Institute. The membership of this Institute has been open to them these many years and many of them have found admission to this Institute many years before the formation of the Western Association; and they formed the Western Association because they were dissatisfied with many things in the Institute, they wanted to form an organization that was not the Institute, that was unlike the Institute in its methods of administration, and they do not want to go into the Institute in its present form, they want to have a voice in the formation of the constitution of this new body, and they wouldn't ask for admission to the Institute as it is at all, and it is needless to consider the matter in that way. They are willing to join the Institute in forming a federation of architectural associations, they are willing to call that federation the American Institute, but they want to adopt a form of government that is more democratic than that of the Institute has been, that is more a government by the members of the association than a government by a board. I think that has been the cause of dissatisfaction.

Mr. Kendall: I did not propose to close the door against other societies, but simply to control it and not to leave the door wide open.

Mr. Frederick: I don't think that I misunderstood the remarks that Mr. Adler made upon the point which we are considering. The impression conveyed to me by his closing remarks was that to effect a union with the Western Association of Architects it was necessary to dissolve the American Institute, that an institution which has been fostered for thirty years should cease, and that a new institute should take its place. When the American Institute of Architects extended its hand of fellowship to the Western Association of Architects, and said come and go with us, it hardly thought that it was necessary to obliterate itself in doing so, and I should be sorry to have that consideration forced upon me now. No one felt more anxious than I did upon that subject, and no one expressed himself more warmly than I did and hoped for its success, but if its success is to be obtained in that manner and in that form I am hardly prepared to accept it.

Mr. Briggs: That is about the point I was getting at. By this consolidation of the American Institute this institution would cease to exist. All the strength of years would be thrown to the winds and there would be a new institution in which we would retain the name and nothing else. That was the point I was getting at when I said it was not right to admit any organization, but to retain the old Institute. We all love the Institute, and it has done a great deal for the architects of the country, and whether

a new organization could do better I cannot say. We ought to think long and wisely before we try to change it.

President Hunt: Will Mr. Kendall take the chair?

(Mr. Kendall in the chair.)

President Hunt: Being one of the original founders of this architectural society, I am disinclined to see it go out of existence. I was absent from the Chicago convention, but I think the American Institute of Architects would be running a very great risk in allowing any association to enter bodily, as has been stated here this evening, into the American Institute of Architects. I think that we would run the risk of a total change and it would be a dubious change, as we do not know to what it might lead. After forming an original society in order that all the practicing architects of the United States might have the advantage, we formed a federal system with the idea that they should enter through the different chapters, and have the same advantages that we had in New York, and we dissolve our original society into a New York chapter. I am naturally opposed to seeing the institution I helped to found pass out of existence. Until we have discussed the whole question and some further light has been thrown upon it, I myself am not personally in favor of allowing the entrance of any society as a body into the Institute. I think we would run a great risk of losing all we have gained for the profession. That is all I have to say.

(President Hunt resumed the chair.)

Mr. Shipman: It seems apparent that this resolution is not going to be passed unanimously by a good deal, and the action of the convention at Chicago virtually declares just what the resolution of Mr. Gibson contemplates. Isn't it better rather than have a disagreeing vote here, not a unanimous vote, not a unanimous expression, isn't it better to let it stand just as it was left at the Chicago convention, and not pass any such resolution as this? I am in favor of the sentiment expressed in that resolution, heartily in favor of it, and while I am up I want simply to say that I have been a member of the American Institute much longer than I have a member of the Western Association of Architects. I have a great deal of love for the old Institute of Architects. I have an active love for the Western Association also. Now there is, I take it, the same object in view in the American Institute of Architects as there is in the Western Association of Architects. I don't think that the members of the Western Association of Architects are so vastly different from the members of the American Institute as to want to tear down or revolutionize anything connected with the Institute. Many of us are members of both, and I think I may safely say that the members of the Western Association have equal, yes greater love for the American Institute than they have for the new organization. I don't mean to say that they are lacking in love for the new organization, as that would not be true. I don't think that the danger suggested by our worthy president really exists. If you take so large, strong, and active a body as the Western Association into communion with the American Institute you must expect from it that same voice in the organization that we have, but that that voice would be for revolutionizing the organization is something I do not expect. I think the object of all this discussion is simply to agree upon some proposition that we will present to the Western Association of Architects as our idea of formation of a federation. I think that instead of saying this should be adopted, we had better say we approve of making such a proposition as that to the Western Association of Architects. I think that my friend, Mr. Adler, has not been fully understood in his remarks about a change in the methods of the Institute. I don't think that he refers to the ordinary methods. I think he has in mind the fact that the Western Association has some new blood, some very active blood, that must be infused in some measure into the veins of the old Institute. I don't believe he means anything revolutionary, or anything of the kind. I make these remarks simply to soften down what Mr. Adler has said.

Mr. Cutler: I simply wish to say that before passing upon the question I should like to hear each article discussed.

(Mr. Shipman in the chair.)

President Hunt: I was as desirous as anyone, and have been from the beginning, in fact, of only one association — in fact, it was my suggestion in the original society that we should federalize the society. What strikes me is, I can't believe but there will be danger in allowing so many to come into our Institute in a body. We have been thirty-one years in getting two hundred members, and in forty-eight months they have outrun us.

Mr. Adler: We are citizens of a republic, and as such we are in the habit, in many communities, every year or every two years, of determining the nature of the government of the community in which we live until the next election. We are in the habit in regard to all, public, national, state or municipal legislation of acting not each for himself, but for the governing power. The unpopularity of the Institute and the great popularity of the Western Association among the architects of this country — and we can't speak of the thirty-one years because during the earlier part of the time there were very few architects — is well known, but why the Western Association has made more progress during the last few years than the American Institute is to be explained by this: in the American Institute of Architects the government, the care of all the interests of the corporate body, has been in the hands of a board personally elected from year to year by itself. That is, the chairman of the convention, a member of that executive board, has appointed a nominating committee that, it may be, has made certain nominations, and there is nothing for the convention to do except simply to approve of those. Again, the constitution of the Institute is so peculiarly worded that it deprives each individual convention of almost every opportunity for any initiative action. It is almost impossible under the present rules of the Institute for any convention to take any initiative, independent action as to the policy of the Institute. Everything is hedged about, and the initiative must be taken by the board. Now, that is distasteful to many and it is popular with but few. We in the Western Association are striving for the same ends as you in the Institute. I think that the advancement of the standing of our profession is as dear to us in the Western Association as it is to those of the Institute, and I think we are prepared to make as many sacrifices for this advance as you are. But our methods have been different; we have been more democratic; and we have been prepared to take the risk of occasionally making a

blunder, and of being compelled perhaps next year to rescind the hasty action of the year before; but we have vested the government of our body in the successive conventions as they have been held in our membership, and for that reason we have had a large attendance at our conventions, and our members have come because they have felt that they are the rulers; that they had something more to do than merely to ratify the nominations of the nominating committee appointed by their executive board, and to discuss a few matters brought before them by their executive board. They have felt that when they came to these conventions they were the association, and they were the government of the association for the time being, and that they only delegated their powers to the executive board from convention to convention because they could not be in perpetual session. It is on that account that we have a larger membership. It is true, probably, with a greater certainty, that the action of the Institute, as determined upon by its executive board, will be more prudent, more conservative, than the action of the convention of the Western Association. There is more time for deliberation; things are not done with a rush; but if we want members, and if we want those members to take an interest in our work, we must give them a voice in the management of our affairs; and it is true that if the amalgamation that has been spoken of is effected, the chances are that a majority of the members of the newly formed American Institute of Architects will be those who are now members of the Western Association of Architects, and the chances are that any constitution which will be adopted will be one which gives greater power to the body itself in convention assembled, and less to the board. I believe that is inevitable, and if that is called revolutionizing the affairs of the American Institute, then if this amalgamation is effected they will be revolutionized, and if you, gentlemen, are afraid to hereafter make yourself part of a body that will govern itself at its conventions, and that will delegate its power only between conventions to a representative board, vote against this amalgamation.

Mr. Briggs: I think I have been misunderstood in assuming that I do not desire a consolidation of all the architectural societies of the United States, but I think it was not necessary to design a new body, and if the constitution and by laws of the American Institute were obnoxious, it was in the power of the members of that body to repeal or change them; and if the Western Association members came in a body, they would have certain power, and that constitution and by-laws could be changed. It has been in the power of the Institute to change obnoxious rules at any time.

Mr. Gibson: That resolution of mine simply declares it to be the sense of this meeting. It is not in any sense conclusive; but since it has been said that it is evident that the vote in any form will not be unanimous, and as, in a great measure, the purpose of that resolution has already been accomplished, I do not think it necessary to push it. We were discussing details, when it became evident we were at cross purposes, largely, upon the main question. Mr. Adler's last manly speech has gone to the root of this matter, and it is evident that the American Institute of Architects has to meet the Western Association on terms of equality. The attempt upon either side to dictate terms would lead to a rejection of the proposition, and the whole thing would fall through. This is not a very large meeting of the American Institute to settle this question, and I therefore beg leave to withdraw my resolution.

Mr. Frederick: I am very glad to have been able to listen to the remarks made by Mr. Shipman, of Chicago. I think that they cover the ground here. I am also glad that Mr. Gibson has seen fit to withdraw his resolution. I am more than glad to have heard the expressions that Mr. Adler made use of. I repeat what I said at first, that I do not think there is any member of the American Institute of Architects, or any member of the Western Association of Architects, more desirous of a thorough unity and federation of every architect in this country worthy of the name of architect than I am. I think that possibly I misunderstood Mr. Briggs in the first remark that he made. I do not think he intended the application that possibly was made of his remark that the volume of membership of the Western Association of Architects would swamp the American Institute. If that volume of membership of the Western Association is in every respect in the way of honorable practice and of honorable conduct, I, for one, have no fears of being swamped. I think it is what we want; we want to be swamped in just that way all over the country; but the only point is with a large part of that association the character is not quite up to the level we would like to have it, or that the leading members of the Western Association would have it; that we, as a body, shall accept the whole of that body if the Western Association of Architects with a little more time and attention can eliminate from its body such membership as might not be desirable, then I am sure there would be nothing left for the American Institute to take exceptions to. If we can feel sure that the weeding out proposed, which has been begun, and has been carried along has arrived at a degree of perfection, and that all of the elements which came in when they could not help it, which always comes in under circumstances like those, for which the Western Association, as an association, is not to blame, because when applications for membership into associations are made, of course you must accept, and generally there is expected a certain status, but I have no doubt, as Mr. Adler has said, the effort made by those representing the Western Association of Architects has been an earnest one to make it just what we would have it. If we by a little more time, and the Western Association of Architects in the same spirit as ourselves worked upon that same subject, I repeat I am not afraid of any swamping process. We have only one object; it is not an object of individuals; it is an object of aggregation of the profession, the whole profession, that it may be ennobled; that it may become greater and better and grander and popular, and teach the people what they should understand better about it. I think myself that after the desire so earnestly expressed by the last convention, that there can certainly be no mistake as to the feelings of the American Institute toward the Western Association, and I should deprecate any words or acts which might offend them or retard this purpose. I agree with some of the members who would like a full expression upon other matters embraced in the report of this committee, and I think, after

all, the points of variance will not be so great as they seem to be in some of the expressions we have had when they come to be sifted down.

After the introduction and discussion of a motion made by Mr. Adler to test the sense of the members that called for the reconsideration of the resolution of a year ago, suggesting a scheme for consolidation, the motion was withdrawn, and the following resolution, offered by Mr. Gibson, was substituted, as follows:

Resolved, That it is the sense of this meeting that the amalgamation of the American Institute of Architects and the Western Association of Architects is desirable if effected under conditions satisfactory to a majority of the members of the American Institute of Architects.

The resolution was discussed and finally put to the convention, when it was unanimously adopted, amid great applause.

After a general discussion of Section 2, an amendment was adopted to take its place in the report.

Mr. Cutler: As I have some reason to believe that a great deal of discussion will come upon paragraph 12 and it is getting late, I move we now take up the discussion of paragraph 12.

Paragraph 12 was then read by the secretary.

Mr. Adler presented a substitute for sections 12 and 13 which was generally discussed and adopted.

Sections 3 and 4 were adopted without discussion.

Mr. Stone: It seems to me we have covered the great general principle at stake and I think it is more proper now for us to adjourn and not consider this matter in detail any more. I think we have got to a point from the direction we have taken in this matter tonight and some committees at a future time will report upon this matter in detail.

On motion the convention adjourned.

SECOND DAY—MORNING SESSION.

The convention was called to order at 11:30 by President Hunt.

Secretary Bloor presented several amendments to by-laws, which were discussed. A substitute for Section 6, Article 1, offered by Mr. Nickerson, was adopted unanimously, as follows:

ARTICLE 1, SECTION 6.—Corresponding and honorary members shall have all the privileges of the Institute except that of voting; they shall not be eligible for election to office. Associate members shall not be eligible for election to the office of president of the Institute or of a chapter, but shall pay the same annual dues as follows:

Mr. Kendall, however, moved the reconsideration of the amendment, and it was finally passed in the following form:

Corresponding and honorary members shall have all the privileges of the Institute except that of voting; they shall not be eligible for election to office. Associate members shall not be eligible for election to the office of president of the Institute or of a chapter.

Mr. Briggs: I would like to move an amendment to Article III of the by-laws, that the initiation fee of fellows shall be changed from \$10 to \$25, and that the yearly dues of associate shall be changed from \$5 to \$10, and for fellows from \$10 to \$20. The membership of the Institute at present is 125 fellows and 106 associates, which give us yearly dues of \$1,750. By increasing the dues it will give us a yearly income of \$3,506. Furthermore, I move to insert in Article V or VI of the constitution, a clause, that the salary of the secretary shall be \$1,500 per year, and all traveling expenses while engaged upon the business of the Institute shall be paid by the Institute. With an income of \$3,500 we would be able to pay the secretary this salary of \$1,500 and still have over \$2,000 for the expenses of the Institute. Our committee will make a recommendation similar to this. I think it is very necessary at this time that some such provision should be made for our future secretaries, and that they should be paid a uniform salary. I wish to put this on paper in this way and let it go over another year, but first I wanted to suggest this now.

The recommendations were ordered treated as other amendments without motion.

Mr. Littell: I ask for the admission of the report of the special committee to consider the report on consolidation. I ask for general consent to introduce this before we take up any other business.

General consent having been given, Mr. Littell proceeded as follows:

Mr. Littell: The special committee to consider the report of the Committee on Consolidation entered upon its labors and found it would require a very long time to fully work out a plan or suggestion in connection therewith, but your committee unanimously agreed to present to this convention a report of a different line and that suggestion in that report of the original committee.

The report as amended by the committee and reported upon by Mr. Littell is as follows:

REPORT OF THE SPECIAL COMMITTEE ON CONSOLIDATION.

1. The name of the proposed federation shall be "The American Institute of Architects."

SEC. 2. Any architectural association which now maintains the condition of membership which has prevailed in the American Institute of Architects, namely, the honorable and exclusive practice of the profession of architecture, the fact of such honorable practice being demonstrated in the manner provided for by the rules of the Western Association of Architects, may become a part of the new organization.

SEC. 3. Associations in states or parts of states may be formed with the approval of the convention of the American Institute of Architects, with power to make laws and regulations for their own government. The local societies, called chapters of the Institute, may be formed with similar powers; but, in all cases, the standard for admission into these subdivisions must be at least as high as that fixed by the constitution of the Institute, and they must not conflict with the requirements of the body in which they are included.

SEC. 4. The conventions of the Institute at large shall be triennial, and, unless ordered otherwise at the previous convention, shall be held in the official metropolis of the nation, the city of Washington. The right of participation in the deliberations of these conventions, and the assignment of votes to individual chapters, shall be the same as at the conventions of the sections. The convention of the Institute at large shall be annual. Unless ordered otherwise at the previous convention, it shall be held in the official metropolis of the nation, the city of Washington.

SEC. 5. The American Institute of Architects shall have two grades of membership, associates and fellows, as defined by the constitution of the present Institute. The Western Association may elect at a day previous to the proposed reorganization as many of its members to the grade of fellow in the American Institute of Architects as there shall be fellows in good standing in the present Institute at the date of reorganization, and all other practicing members of each society shall enter the new Institute as asso-

ciates. After reorganization no person shall be eligible to the grade of fellow unless he shall be at the time of balloting an associate, or unless he shall receive the unanimous vote of the Institute in convention assembled.

SEC. 6. The officers of the American Institute of Architects shall hereafter be a president and as many vice-presidents as there are chapters, an honorary secretary, a general secretary, a secretary of foreign correspondence, a treasurer, and a board of trustees. The board of trustees shall consist of the above-named officers and twelve members, the twelve members to be reflected at the time of organization shall serve four for three years, four for two years, and four for one year. And thereafter four members shall be elected at each annual convention to serve for the term of three years.

SEC. 7. The duties of these officers shall be as is customary in similar organizations. The general secretary, secretary of foreign correspondence, and treasurer, shall be salaried officers, the amount of their salaries to be fixed in proportion to the revenue left after providing for expenses of publication, rent, and other current outlay, and the general secretary to be paid on the basis of the fact that if his work be adequately done, it must necessarily absorb all, or nearly all, of his working time.

SEC. 8. These provisions shall take effect when ratified by a two-thirds vote of all professional members of the American Institute of Architects and a two-thirds vote of all professional members of the Western Association of Architects, but when the same person is a professional member of each association his vote shall be counted as only one-half a vote.

Respectfully submitted,

E. H. KENDALL, New York,
D. H. BURNHAM, Chicago,
T. P. CHANDLER, JR., Philadelphia,
T. M. CLARK, Boston,
A. J. BLOOR, New York.

Submitted as amended by special committee, Emlin T. Littell, Chairman.

After some discussion, the question of the proper number of fellows as against the proposition of Mr. Adler that all members be placed in one grade, the meeting place to be at Washington or Chicago as against a desire of some members to have successive meetings in all parts of the country, and the proper formation and relations of chapters, Mr. Adler offered the following resolution:

"Resolved, That the committee of the American Institute of Architects upon consolidation of architectural association be continued, and that it be directed to act with the corresponding committee of the Western Association in determining a definite plan of consolidation in the next six months. It is further resolved that when this plan of consolidation has been determined upon and approved by the boards of trustees and directors of the American Institute of Architects and Western Association of Architects the same shall be printed and copies of the same distributed among the practicing members of both bodies. It is further resolved that within one month from the distribution of these printed copies of the committee's report there shall be a letter ballot upon its adoption by the practicing members of the American Institute of Architects and Western Association of Architects, and that if approved by a two-thirds vote of both bodies it shall be declared adopted, and the two bodies consolidated under its provisions. The board of trustees of the American Institute of Architects and the board of directors of the Western Association of Architects shall in case of such adoption at once issue a call for a convention of the members of both bodies to be held at such place and at such time as may then seem most expedient, and a re-organization of the American Institute of Architects shall be the order of business of said convention."

The resolution was unanimously adopted.

The reports of the nominating committees were then called for.

Secretary Bloor: The two following reports have been submitted:

First Committee report: For president, R. M. Hunt; treasurer, O. P. Hatfield; secretary, A. J. Bloor; secretary foreign correspondence, Adolph Cluss; board of trustees, Napoleon Le Brun, E. I. Nickerson, H. M. Congdon, George A. Frederick; committee on education, Prof. N. Clifford Ricker, Alfred Stone, Prof. William Roach Ware, W. C. Preston, John Moser; committee on publication, W. R. Briggs, T. M. Clark, J. R. Willett, G. C. Mason, Jr.

Second Committee report: For president, R. M. Hunt; treasurer, O. P. Hatfield; secretary, A. J. Bloor; secretary foreign correspondence, R. W. Gibson; board of trustees, E. T. Littell, W. W. Clay, H. M. Congdon, George C. Mason, Jr.; committee on education, N. Clifford Ricker, Alfred Stone, William Roach Ware, J. M. McLaughlin, Henry Van Brunt; committee on publication, Charles Crapsey, T. M. Clark, S. V. Shipman and W. C. Preston.

Mr. Scofield: Before we proceed to ballot I would say I notice in the candidates proposed by this second nominating committee that my name is mentioned as one of the trustees. I wish to say that I have already, or will soon have served my time of conscription, and I have been to considerable trouble in attending the meetings at times, and in order to try to do my part of the duty as a member of the board, and I do not feel as if I could serve again. I am willing to always make a martyr of myself to a certain degree for the good of the Institute, but I know there are others who are more willing than I am, and I hope that you will be honorably discharged, and I beg leave to decline in favor of one of the members suggested in the report of the first committee.

President Hunt: This question about martyrdom reminds me of a statement I wish to make, especially as I was not able to decline a nomination last year at Chicago. There is probably not a member of the Institute to whom this position is more disagreeable to be put in than it is to me. The vote of confidence is very pleasant, and I thank you for it, but there are other members who would make a better president, and I beg, sincerely, that some other man be put in my place.

(Cries of no, no.)

Mr. Briggs: As our president, secretary and treasurer are named on both tickets, I move that the secretary be instructed to cast one ballot for those three officers.

The motion was put and carried.

Mr. Stone: I move we proceed to ballot for the board of trustees.

President Hunt: I will appoint Mr. Moser and Mr. Kipp as tellers.

Secretary Bloor: The chairman of one of these committees has requested me to place the name of S. V. Shipman on the committee on publication in place of another name.

The balloting was then proceeded with, and the following officers were duly declared elected:

President R. M. Hunt; treasurer, O. P. Hatfield; secretary, A. J. Bloor; board of trustees, Emlin T. Littell, Napoleon Le Brun, G. A. Frederick and W. W. Clay; committee on education, W. R. Ware, N. Clifford Ricker, Alfred Stone, E. B. Preston and J. W. McLaughlin; committee on publication, T. M. Clark, Charles Crapsey, W. R. Briggs, George C. Mason, Jr., and E. B. Preston; secretary of foreign correspondence, R. W. Gibson.

A paper was then read by Mr. Stone, "The late President Walter," written by George C. Mason, Jr. (Printed on page 33.)

During the reading of this paper, by Mr. Alfred Stone, the utmost stillness prevailed, and the love and veneration in which President Walter's memory was held by the members of the Institute was evidenced by the expression of every face, many being affected to tears.

The convention adjourned to October 19, at 11 o'clock.

THIRD DAY—MORNING SESSION.

The convention was called to order at 11:10 A.M., by Vice-President Kendall, in the absence of President Hunt.

Professor Ware, of Columbia College, then made the report of the standing committee on education.

Mr. Ware made a verbal report of the department of architecture at the School of Mines, Columbia College, briefly describing the equipment of and the library of books, drawings of photographers with which it had been presented by Mr. Augustus Schermerhorn; the instruction in chemistry, physics and engineering, which is taken with the students of the other departments, and that in mathematics, mechanics and sanitary engineering, which has to a great extent been separated from the rest of the school and arranged expressly to meet the wants of the students of architecture. The more strictly professional topics taught came under the heads of practice, including specifications, working drawings, estimating, and professional usage; the history of ornament, with exercises in English composition; ancient, medieval and modern history, with exercises in reading French and German text-books; the theory of architecture, including a series of the various schemes of aesthetic and theories of the line of beauty, of proportion, and of the contrast and harmony of color; the arts auxiliary to architecture, such as stained glass, mosaic, fresco, etc.; drawing, with both the pencil and the brush, including the use of water-colors; shades and shadows and perspective; descriptive geometry and stone-cutting; and, finally, the study of architectural design, beginning with the study of the five orders, and continuing by means of a series of problems, large and small. There seemed to be some points of novelty in the teaching of history, French, shades and shadows, mathematics and freehand drawing, and in the work required of the students during their summer vacations.

Vice-President Kendall: We feel very much obliged to Professor Ware for his very able and most interesting report.

The report of auditing committee was submitted, accepted and referred to the Committee on Publication.

Mr. Frederick: Before taking up the report of the committee upon the remaining reports, I should like to ask the committee on the reports of the trustees and chapters for the reading of a memorial which was attached to the report of the Washington Chapter, it being of considerable importance. It is not long, and if time will permit, I should like to ask for the reading of it.

The following report of the Washington Chapter, American Institute of Architects, is given, as it includes an important memorial to congress regarding the establishment of a national testing station.

The monthly meetings of the chapter have been held regularly, with the usual summer interregnum, and topics of local importance were discussed by the members.

Mr. W. Bruce Gray and Mr. C. A. Harkness have been added to the professional membership.

In the spring the building regulations for the District of Columbia were amended, and the chapter was requested to recommend needed changes or alterations. This request was sent in only at the last moment before the regulations were sent to the printer. So as to take advantage of the opportunity the chapter held a special meeting at the commissioner's office in the district building, when the copy was submitted; each section and clause was read, discussed and voted on by the chapter. Many amendments were suggested and the majority of the changes recommended were accepted by the commissioners.

One of our monthly meetings was made specially interesting by an elaborate paper prepared and read by Mr. Adolf Cluss on his trip to Mexico. The peculiarities of the country, people and architecture, and the methods of architectural construction, and business in vogue, were described.

The lien law of the district has been before the Congressional Committee for amendment to the extent that notice should be served at the time of delivery, whenever material men or sub-contractors desired to take advantage of a lien.

The secretary was directed to communicate with the committee and to urge the passage of the bill, but congress has taken no further steps in the matter.

The question of introducing a bill requiring an examination of all future architectural practitioners has been repeatedly before our chapter meetings, but no positive action has been taken.

In connection with this report you will find a complete list of officers and members to date.

Professional Members—In the order in which they signed the constitution: J. L. Smithmeyer, John Moser, O. von Nerta, S. M. Howard, W. M. Poindexter, J. A. Henry Flemmer, J. R. Marshall, C. A. Didden, Glenn Brown, C. H. Read, T. F. Schneider, C. A. Harkness, Robert Stead, Henry H. Law, Paul Schultze, Adolf Cluss, Jos. C. Hornblower, J. West Wagner, Will A. Freret, Edward Clark, H. L. Page, H. H. Kendall, W. Bruce Gray.

On October 5, the following officers were elected: Adolf Cluss, president; Wm. Poindexter, vice-president; C. A. Didden, treasurer; Glenn Brown, secretary; C. H. Read, J. R. Marshall, O. von Nerta, committee on admissions.

The following memorial was submitted to the chapter by Mr. Cluss, and it was unanimously determined that it be incorporated in our annual report, with the request that the board of trustees, or the convention, take the necessary preliminary steps to bring the matter before congress.

MEMORIAL ON THE ESTABLISHMENT OF A NATIONAL TESTING STATION FOR BUILDING MATERIALS IN THE UNITED STATES.

The building interests of the country have assumed such vast proportions and important bearings on life, limb and health of the people, as to demand a commensurate, organized recognition from the government, such as has been awarded in the past to commerce, shipping, manufactures, agriculture, mining, education, transportation, and sporadically to specialties, such as ores, metals, vitals, drugs, etc.

Consistent steps should be taken without delay toward relieving the representatives of the building interests from an isolated position and unsatisfactory dependence upon partly antiquated hand-books, or incomplete new publications prepared by private enterprise, with diligence and ability, but without adequate financial and technical resources and scientific support for keeping abreast the exacting demands of a progressive age, in the midst of a prosperity in building enterprises and engineering feats, without any precedent in the world's history.

While fully appreciating the valuable work of the Franklin Institute in Philadelphia, of Prof. Thurston in Hoboken, the wholesale crushing of specimens of cements and stones, with the 200-ton government testing machine at Watertown Arsenal, and valuable tests made by the officers of the engineer corps, U. S. A., it cannot be denied that much valuable information is scattered so as to be inaccessible, in many cases forgotten, wasted or lost, and on the other hand, that the ground is, in various directions, not covered at all.

The same difficulties, though in a minor degree, have been encountered in the older, long explored, principal countries of Europe since the present wonderful activity in works of architecture and engineering has set in.

The solution has been found in the establishment of special institutions, testing stations for building materials, which have proved to be safe regulators for the restless work.

For safe building, the statical coefficients of strength and elasticity of the materials must be ascertained and controlled, whenever a case of importance occurs. The hardness and durability of building stones from newly opened quarries, or new strata of old quarries must be tested and steadily observed. The constructions, to which different materials are combined, must be considered in connection with the magnitude and action of the opposed forces, and the best conditions for using the obtained factors must be determined. The practicing architects cannot attempt to perform such labor in order to obtain needed information. The quarry and other material men need likewise facilities for obtaining reliable tests of newly opened deposits of raw materials, as guides for the best methods of producing and manufacturing them. All these data, experimentally determined, form the basis of the judicious use of the building materials.

In our case, a central head station ought to be founded by the federal government as a nucleus for harmonious methods and guidance of local institutions to be maintained by states or large central cities, east, west, north and south. This central station to be under the lead of professional specialists of highest standing so as to insure at the outset the confidence of authorities and citizens in the straightforwardness of the tests and experiments. Liberally fitted out with apparatus and laboratory accommodations, the technical expert, physicist, and chemist are to promote each other's ends by mutual support, and, at stated intervals, by consultations with practitioners, called in for that purpose.

Besides attending to the tasks delineated above, the officials of the station are generally to determine according to a moderate scale of rates, the quality of materials for interested parties from their uniform points of view, and in case of litigations may be called to give opinions or make decisions of weight. To protect the interest of inventors or other private parties, the officials of the station are to be sworn to keep such orders private, unless the interested parties give their assent to publicity, when they may be published in the annual reports of the station, if of sufficient public interest.

Strength and properties of quarried stones, flagging, burned and unburned artificial stones, cements, limes, plaster of paris, builders' tests, asbestos fabrics, and other fire-proof materials, pipes, wire ropes for elevators, wrought and cast iron columns and beams, corrugated metal $\frac{1}{2}$ strength of brickwork, masonry and joints, stability of brick and stone piers, are among the objects within the range of the station. Tests on the lasting qualities of paper and ink for public documents and similar work may come in as incidents.

Based on the initiative of the Institute Statistique of France, improved central stations, with branches in large cities, are in successful operation in Switzerland, Germany, Austria, Russia, etc. Prof. Tetmeyer in Zurich, Dr. Boehme and Martens in Berlin, Prof. Bauschinger in Munich, and others here have already made their mark in developing the resources of their countries and in advancing sound knowledge of universal importance. It is for the proposed station to scan the vast field, add to the stock of original experiments with there sources available in this country, and bring and keep results in best shape for use in practice.

It is essential to arrive at recognized uniform classifications, under which systematic gradations of the different groups of building material are to be arranged according to their most important properties, and to establish binding rules for tests of quality and precise conditions for the delivery of materials.

The testing station in Berlin is equipped for tests of material in hot, cold, dry, wet or changeable state. It owns hydraulic presses with varied capacities up to 320,000 pounds, and facilities for inserting test pieces from the minutest sizes to large sized columns and piers of brickwork, masonry, etc.

There are accommodations for determining specific gravity, porosity and hygroscopicity.

Machines based on combined leverage systems for tests of tensile, compressive, transverse, shearing and torsional strength.

Machines for testing materials under often repeated strains.

Atwood's machine for testing resistance to live forces.

Presses for testing pipes exposed to internal pressure up to 500 pounds per square inch.

Machines for determining the abrasion of paving materials by wear.

Apparatus for microscopic tests and photography.

Apparatus for analyses of organic and inorganic substances, fuels, oils, etc.

The European institutions are due to the initiative of the national societies of architects and engineers. It is suggested that the American Institute of Architects ask the cooperation of the American Society of Civil Engineers, and, perhaps, also, the Society of Mechanical Engineers, in memorializing and prompting congress on this important subject.

Respectfully submitted,
GLENN BROWN,
Secretary W. C. A. I. A.

Secretary Bloor: I move that this be referred to the Board of Trustees for investigation and promotion.

That motion was put and carried.

Mr. Frederick, chairman of the committee, moved that the report of the special committee on education and the report of the committee on remaining reports be received and printed in the proceedings of the convention, their provisions and recommendations being placed in the hands of the trustees for consideration and action.

Secretary Bloor: I move that Professor Ware's paper be added to that and included in this report, and whatever the committee recommend for this part of the report be adopted for that part of the report presented by Professor Ware.

There being no objection offered to this, Vice-President Kendall so directed.

The report of the special committee to provide improved methods in the architectural service of the federal government was then read and accepted.

The report of the committee on board of trustees and chapter reports was then read by Secretary Bloor, as follows:

REPORT OF SPECIAL COMMITTEE FOR THE CONSIDERATION OF THE REPORTS OF THE BOARD OF TRUSTEES AND CHAPTERS.

Mr. President and Gentlemen,—Your committee, to whom was referred the report of the board, has carefully considered the same and report that the thanks of the Institute are due to the members of the board for the comprehensive report submitted by them, and would respectfully recommend:

1. That the report as read before the committee be adopted, placed on file and printed with the records of the convention.

2. That inasmuch as the board calls the attention of the convention to its financial condition, resulting from the reduced and therefore inadequate dues, your committee would respectfully recommend that the initiation fee of the fellows be increased to \$25, the annual dues of fellows be increased to \$20 and that of associate members to \$10.

3. In consideration of the constantly increasing work of the secretary, your committee would respectfully recommend that the secretary of the American Institute of Architects be paid a salary of \$1,500 per annum, together with such traveling expenses as the board of trustees may deem proper.

4. Concerning the various chapter reports referred to your committee, we would respectfully submit the following:

In regard to the report of the Baltimore Chapter, your committee would suggest that special efforts be made to increase its membership, and to embrace, if possible, all eligible practicing architects of that city.

The reports of the Boston, Chicago, Cincinnati, Indianapolis, New York, Philadelphia, Rhode Island, St. Louis and Washington chapters show them in the main to be in a flourishing condition, and recommend that they be accepted and printed in the proceedings of the convention.

It is the sense of this committee that in the majority of cases more frequent meetings, well attended, would largely increase the local and general interest in the profession, and we especially recommend that individual efforts in this direction be made by the members of the various chapters.

Your committee regret the absence of reports from some of the chapters, and respectfully suggest that some action be taken making it obligatory upon the secretaries of the

various chapters to forward their reports to the secretary of the Institute at least thirty days before the annual convention.

We find appended to the report of the Washington Chapter a memorial on the establishment of a central testing station for building materials in the United States, which we deem of special interest to the profession, and recommend that it be read before the convention.

GEO. A. FREDERICK,
WARREN R. BRIGGS,
W. W. CARLIN.

On motion, the report was accepted.

Report of committee on permanent home for the institute was received and the committee continued.

Vice-President Kendall then read the report of the committee on indemnification of Mr. Bloor. The report was accepted, and Mr. Holly continued as chairman of the Bloor Indemnification Committee.

The paper of Mr. Cluss, on "Mortars and Concretes of Antiquity and Modern Times," was ordered printed and specially distributed among the members of the Institute. (Printed on page 35.)

Mr. Gibson stated he would prefer that his own paper be not read, and moved that the remaining papers be accepted as read and ordered printed. (Printed on page 32.)

The motion was put and carried.

Mr. Frederick: I think the great misfortune of existing building laws is in some respects being very lax, and in other respects too severe, and I think if a building law could be devised for the various localities that was liberal and simple and concise, it would be of advantage to the communities, and it was with a view of calling attention to the various points which should be considered in framing such a law that the paper I prepared was written and submitted.

The paper was accepted and ordered printed. (Printed on page 38.)

Mr. Gibson: I think Mr. Frederick and myself have entered upon the same question to some extent. I am going to ask, therefore, if these papers will be printed together or separate? Will they be printed in the report of the proceedings?

Vice-President Kendall: I have no doubt we shall have them in all reports of the convention which pretend to be complete.

Secretary Bloor: I offer the following resolution:

Resolved, That the thanks of this convention are eminently due to the Western New York State Association of Architects for their exceedingly fraternal and refined hospitalities to the American Institute of Architects, and that the authorities of the Buffalo Library Building be included in this vote for the use of the accommodations they have extended us.

Mr. Carlin: I would like to make one correction in the wording of that resolution, it should be the Buffalo architects, instead of the Western New York State Association.

Secretary Bloor: I accept the amendment.

The motion was carried by a rising vote.

Mr. Preston: The question of the payment for such work, although it is mentioned in the by-laws of the Institute, it seems has never received the proper attention and discussion or expression of opinion on the part of the Institute, and it has never been enunciated with the strength and directness and put in the form it should be. I refer to the employment of a clerk of the works. I think there ought to be a certain amount of discussion at this convention so another year will not be lost before it is brought before the public. I would suggest that something of this sort should be given forth from the Institute of Architects as voicing the propriety and desirability of the employing of a clerk of works, as to his payment, and as to the value of his services:

The American Institute of Architects recognize as proper and desirable the employment of the clerk of works in the erection of all buildings of importance, as a means of obtaining the best results. He should be paid by the owner, but should be under the direction and control of the architect. The architect's supervision of and responsibility for the work should be in all cases insisted upon as vital to the best interests of the owner, but such constant oversight as can be exercised by a competent clerk of the works is an invaluable adjunct to aid the labors of the architect in securing uniform, good, honest work.

Mr. Preston: In making this suggestion it seemed to me that I was not bringing forward any new ideas or instituting any new practice, but simply voicing, as a concise statement, the law, the recognized rule of all good members of the Institute in the matter of public works, but which is not accessible, that we can't refer to, that we can't take out and hand to a client to aid in our discussion of the matter with him, and to say to him, that this is not simply our individual opinion, but what is recognized as desirable and proper by the best minds and practitioners in the country. This is simply a collection of two or three things which are scattered, perhaps, in the by-laws of the Institute, and others which are well-known and recognized, but this is putting them in a way where they can be brought before the public, and where they will be accessible.

Secretary Bloor: I would like to remind you that the Institute has already, in its by-laws, practically given its opinion on the importance of a clerk of the works; that is to say, it is printed with the by-laws; it is a section of the schedule of charges for the professional practice of an architect. I simply remind the Institute that this has been considered before. It reads as follows:

On buildings where it is deemed necessary to employ a clerk of the works, the remuneration of said clerk is to be paid by the owner or owners, in addition to any commission or fees due the architect. The election or dismissal of the clerk of the works is to be subject to the approval of the architect.

Mr. Preston: I do not think this quite covers the case I desire to cover in my statement. This simply says where it is deemed necessary to employ a clerk of the works. I want to go further than that, and say it is necessary in all buildings to have a clerk of the works, and that he should be employed, and that his services are valuable, and that it is for the best interests of the owner to have such a clerk of the works.

Mr. Preston's resolution was discussed, and amended by Mr. Gibson, to include a committee to report further upon his suggestion, and carried unanimously.

President Kendall: Mr. Preston, Mr. Gibson and Mr. Adler are appointed as a committee to consider that subject and report. I nominate Mr. Gibson as chairman of the committee.

Upon motion, the convention then adjourned *sine die*.

CONVENTION NOTES.

AN excursion to Niagara Falls, and a drive about the city parks, etc., over the forty odd miles of asphalt, were features of the entertainment offered the visitors by the Buffalo architects. They were equally participated in and equally enjoyed by every visitor.

MESSRS. CUTTING & DELANEY, the well-known furniture and interior finishing firm of Buffalo, kindly placed upon the table at the convention headquarters an original copy of Chippendale's plates, and also a portfolio of colored plates of furniture originally owned by Fernando Ward. They were examined with much pleasure and interest by the architects.

ON the evening of the 16th instant, the Executive Committee of the Western New York State Association, consisting of J. G. Cutler, W. W. Carlin, J. H. Pierce, L. P. Rodgers and C. E. Colton, gave a "round-table" dinner to invited guests. These were President Sidney Smith, of the Western Association; D. Adler, John W. Root; Richard M. Hunt, president of the American Institute; A. J. Bloor, secretary of the American Institute; Frank Houghton, editor of the *American Builder*, and R. C. McLean, editor of *THE INLAND ARCHITECT*.

A PLEASANT feature of the convention was the attendance of a number of ladies. True, they did not attend the sessions, but in the rides and excursions which made a feature of the occasion their presence was most agreeable. There were present Mrs. Colton, of Syracuse; Mrs. Barber, of Syracuse; Mrs. Eichhorn and daughter, of Orange, New Jersey, and last but not least Mrs. Frederick and Miss Katie Frederick, of Baltimore, and the Misses Cluss, of Washington, D. C. It seems to be an unspoken axiom of a convention that that architect who brings his wife is blest, but he who also brings his daughter is doubly blest.

THE banquet at the Niagara Hotel was a most enjoyable affair, about fifty guests being present. The hotel, built by Architects Green & Wicks, of Buffalo, is one of the finest west of New York, and, if anything, superior to the Stillman House, at Cleveland. The menu was well chosen, and the absence of a formal programme made the after-dinner speeches short, pithy, and in some cases brilliant. The place of honor was occupied by the Hon. E. C. Sprague, of Buffalo, and his remarks as toast-master were repeatedly applauded. He spoke upon the weather, and his observations upon this novel subject were somewhat different than those found in the records of the signal service. Mr. Kendall's remarks were in his usually elegant and scholarly style, and were as the sauterne of the feast to the amontillado of Mr. Carlin's effort which followed. Mr. Carlin confined his remarks to the past, present and future of the Western New York State Association. They were bright, terse and prophetic. His was decidedly the speech of the evening. Mr. Sidney Smith followed, outlining the history and policy of the Western Association of Architects. Among a number of others called upon, the speeches of Messrs. Stone, Preston, Bloor, Littell, Cluss and Moser were most noted. The banquet was pronounced a decided success. The only regret expressed was in the unavoidable absence of Messrs. Adler, Hunt and Cutler.

THE enterprise of several leading building material and appliance concerns in placing exhibits of their wares where they could be readily inspected was generally commended. These consisted of an exhibit of some fine samples of Gatelawbridge Scotch red freestone; Petros, Kentucky, white and gray, and Bedford buff and blue oolitic limestones, by George W. White, of New York. The color and texture of the Gatelawbridge stone is superb, and the excellence of the other stones are too well known to require comment. C. C. Sutherland had an exhibit of electric motors in operation, and other electric appliances. He is general agent for the Brush Electric Company, located at Cleveland, Ohio. Theo. M. Baker, representing Merchant & Co., of Philadelphia, made a practical exhibit of that firm's brands of tin. It was a general comment that the persistent efforts made by Merchant & Co. to guarantee the quality of their goods was most commendable, and worthy of the recognition of the architectural profession as well as the public, who were so well protected against poor material by their method of stamping each sheet of tin, and branding the guaranteed weight of each box. Mr. Baker made a good impression upon those who called upon him. The Chicago Hardware Manufacturing Company was represented by a superb line of hardware, and their genial eastern agent, Mr. George J. Wells. "Everybody knows the Niles Lock," was the comment of his visitors, but he had sufficient novelties to show to make up for any lack of interest in that direction. The Champion Spring Hinge was examined with considerable interest. It was, however, noted that few seemed to know of the Chicago Hardware Manufacturing Company as a large concern, or even as the makers of the Niles Mortice Locks. Anyone receiving a call from Mr. Wells, however, finds him a gentleman whom they are glad to meet again and often. There is one gentleman who appears at every convention, and who has perhaps a more general acquaintance and friendship among the architects of the United States than any in the material line. This is Robert W. Brown, representing the well-known house of John A. Roebling's Sons Company, manufacturers of wire lathing, etc. He always displays a full line of samples, is always ready to show them, and is an indefatigable worker for the interests of his house. As his goods are standard and his company genial, he is always welcomed as one of the fraternity.

Our Illustrations.

Grace Church tower, Kansas City, Mo., A. Van Brunt, architect.

Main entrance of Y. M. C. A. building, Omaha, Neb.; Mendelssohn, Fisher & Laurie, architects.

Reredos, executed for St. Paul's Church, Evansville, Ind. This was carried out in oak, elaborately carved, with decorative panels against gold backgrounds on either side extending up beyond the base of the window. The decorations were executed by Mr. F. S. Lamb, pupil of Le Febvre and Boulanger, Paris.

Comments on the Standard Contract.

THE necessity for a good form of contract between owners and contractors is almost daily illustrated, and it is very fortunate that the standard form recently agreed upon by the architectural associations and building trades, is at last before the public. It is quite impossible for a lawyer unfamiliar with the details of building operations to draft a contract that will protect both parties to such contract, while the expense of employing an attorney for this purpose is often excessive. The Minneapolis Court House Commission started their active building work with a dispute, growing out of the first contract made, and were obliged to refer the matter to an attorney. The use of the standard contract would have avoided this trouble, for the contract is specific on the point at issue. The judges of our courts will, no doubt, soon recognize this contract as a fair interpretation of the relations between owner and builder, when no specific contract exists, or in disputes over obscure points in written contracts. Then the standard contract may be considered as a legal form, and one that is safe for any person to use without paying an attorney's fee. One of our exchanges is very much displeased because the contract was copyrighted, and its sale put into the hands of a firm to whom will go all profit arising out of its sale. As this exchange takes occasion to criticize every act of this firm, its present condemnation is somewhat tempered, at least to the firm, by this exchange's own jealousy.—*Northwestern Builder, Decorator and Furnisher.*

We notice in some of our contemporaries serious objections to the action of the joint committee on uniform copyrighting and giving the right to print and furnish the blanks to any one firm. A Chicago journal ventilates its views as follows: "It is to be presumed that this uniform contract has been formulated for the purpose of doing the greatest amount of good for the greatest number—that the labors of these committees jointly representing the architectural profession and the building trades has been for their general benefit and not for the financial gain or business of anyone. That it was a wise provision to copyright the contract to prevent any change or interpolation is not to be disputed; but to make use of the advantage of a copyright which has the prestige of a patronage of three national associations, and to 'farm out' for a term of five years to any single firm of publishers the sole right to publish this document, the joint property of the three organizations, is a usurpation of authority, illegal and to be condemned. * * * So long as the contract shall be printed according to the original copyrighted copy, authority should be given to any printer to produce it." The main object to be attained by the appointment of the committees from the three associations was the formulation of a contract acceptable to each of the associations, and which would be valuable through the recognition given it by them. If, as the contemporary demands, permission be given to every printer in the country to produce it, what security have we that changes and interpolations may not be made until the original identity of the contract is lost among the various other forms which will be produced, and all claiming to have the official recognition of the three national associations, and placing the

building trades back into the condition which made the adoption of a uniform contract a necessity. There would be nothing to prevent unscrupulous contractors or architects from having blanks printed to conform to their own dishonest methods. The joint committee evidently foresaw the complications which would arise if the publication of the contract be given out to Tom, Dick and Harry, and gave it into the hands of the Inland Publishing Company, whose imprint upon the blank will be a guarantee of its genuineness.—*Northwestern Architect and Improvement Record.*

EXTRACT FROM THE REPORT OF COMMITTEE ON UNIFORM CONTRACTS.

* * * It was then (after final revision) determined by the joint committee that the best way to secure the integrity of the text, and to prevent alteration (except in writing), was to have it copyrighted; also, that after having fixed a schedule of prices for its sale, including therein a royalty payable to the committee, and amounting to a sufficient sum to defray the committee's expenses, its publication should be intrusted to a printing establishment of sufficient capacity and energy to supply the form to the profession and the public, and at the same time give it the requisite amount of advertising.

It was not supposed possible that the committee could control its text in any other way than by making a contract with its publisher, in the form of a license, which should carry a penalty of forfeiture for any unauthorized alteration of any of its clauses, and simply impossible to so control it, if the right of publication should be made general to the printers of the country, or to any considerable number of them.

The offer of a printing house in Chicago, well known as publishers of an architectural journal, was considered as filling all the conditions required, and being favored by a majority of the committee, it was accepted, and the blanks are now being supplied by them at the prices agreed upon. As this action has been somewhat criticised, it is due to the committee to be permitted to make this explanation, and for them to state that they believe it to be the best that could have been made under the circumstances.

In regard to the value of the form itself, the committee are gratified to learn that it is being adopted by many of the most influential members of the profession and firms of architects in the country, and is considered as essentially impartial and fair for the interests of both the owners of buildings and the contractors for their erection. Although there is some difference of opinion as to the advisability of including in it some few of its phrases, it is still thought to be upon the whole a useful form, and one that will serve the needs of both architects and builders. As to the latter, it may be said that it will make their estimating much more simple and satisfactory if it should become a standard form, and at the same time contribute to a better understanding between all parties concerned. * * *

Respectfully submitted,

O. P. HATFIELD,
ALFRED STONE,
J. H. WINDRIM,

Committee on Uniform Contracts, A. I. A.

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THE work of preparing for the coming convention of the Western Association of Architects at Chicago, November 21, is being rapidly completed by the secretary and the local committee from the Board of Directors. A large attendance is expected, and ample provision is being made for the reception of all members, and all members of the profession will be welcomed as visitors. The following general circular of information is just issued:

CIRCULAR TO MEMBERS.

WESTERN ASSOCIATION OF ARCHITECTS,
SECRETARY'S OFFICE, MONTAUK BLOCK,
CHICAGO, November 9, 1888. }

The fifth annual convention of the Western Association of Architects will be held in Chicago November 21, 22 and 23, 1888.

The important measures that will come before the convention for consideration and action demands that every member shall be present.

This is especially true in regard to the proposed consolidation of the American Institute of Architects and the Western Association of Architects, which should be discussed and acted upon by the entire membership.

The following general information can be given:

HEADQUARTERS.

The headquarters will be at the Leland hotel, corner of Jackson street and Michigan boulevard. The convention hall has been secured in the same building, with committee rooms, etc., adjoining. All members will, therefore, as far as possible, locate at this hotel, where a special rate of \$3.00 to \$3.50 a day has been obtained.

RAILROAD RATES.

A special rate of a fare and a third for the round trip has been obtained from all the traffic associations, so that any architect, whether member or otherwise, who may attend the convention from any part of the country, can obtain this rate.

Special attention is called to the rule regarding reduced rates on railroads, which makes it imperative that, when purchasing tickets for Chicago, the agent be asked for a *certificate*. This, when signed by the secretary of the association, will entitle the holder to the reduced return fare, which cannot be obtained without the certificate from the home agent. Tickets must be bought within three days of the date of meeting, and will not be good more than three days after November 24. Members east of Pittsburgh and Buffalo will be supplied with certificates by the secretary, and those who contemplate attending and do not receive a blank certificate should at once notify the secretary.

EXHIBIT OF DRAWINGS.

An exhibit of drawings and photographs will be one of the special features of this meeting, and members should prepare to send samples of their work. A special circular will be issued directing how to send, etc., at a later date. Drawings will be received of work which has been executed as well as of that which is in contemplation.

NORMAND S. PATTON, Secretary.

JOHN W. ROOT, J. J. FLANDERS, SAMUEL A. TREAT,	} Committee of Arrangements.

Special circulars will be issued by the secretary as found necessary, and, meanwhile, architects should arrange their affairs so that they may not fail to attend this convention, which promises to be by far the most important yet held by the Western Association of Architects.

WE cannot but believe that all our readers recognize the desirability and importance of a consolidation or confederation of all of the architectural societies in this country into one large, strong, influential body, embracing in its ranks as nearly as possible every reputable practitioner of architecture in the United States, possessed of revenue sufficient to establish a bureau of general professional information and legal advice for all its members, and that they form a body powerful enough to make its influence felt in the formation and passage of building laws, and in the policy of municipal, state and general government buildings. We should appear to doubt the intelligence of our readers were we to furnish them with arguments to prove how much better for the profession of architecture as a whole, and for each member individually, would be an architectural society of this nature than our architectural associations as they now exist, valuable from an ethical standpoint though they be. We call attention to the movement for bringing about a consolidation of the American Institute of Architects and the Western Association of Architects, not because we fear that there are any among our readers who do not consider this movement to be laudable in the abstract, but because we fear that a misplaced

spirit of loyalty to individual organizations, which have become dear to those who have founded and maintained them, may induce many to permit a prejudice based upon this misplaced loyalty to overcome their convictions of abstract right and to overshadow their sense of duty to themselves and their profession.

WE address ourselves, therefore, more particularly to those members of the Western Association of Architects who have been with it since its inception, who have guided its policy, and who have made its record, and whose well justified pride in the growth and development of their association may lead them to oppose a merging of the same in the American Institute. We wish to call the attention of all of these to the fact that it is not its name which has created the short but triumphant career of the Western Association of Architects, but its membership; that if those who have made and maintained the life and virility of the Western Association of Architects become members of a new organization, then, even if the name of the young giant Western Association of Architects gives way to that of the venerable American Institute of Architects, their spirit and life and enterprise will be infused into the new organization and will impart to it all the characteristics which have thus far so favorably distinguished the policy of the Western Association from that of the Institute. Nor must it be forgotten that even mere age and venerability and a clean record do count for something in this world. It should be remembered that the founding of the American Institute thirty years ago was an act which probably required more of courage and of self-sacrifice under the general conditions of professional standing then prevailing in this country than did the formation of the Western Association but four years ago.

AFTER all, the pioneer work of the association of the better, and therefore more progressive, architects of this country into one association was done by the founders of the Institute. The recognition of the justice of the schedule of commissions recommended by the Institute by the courts in many states of this union, was due to the wisdom and good judgment of the founders of the Institute. Whatever has been done by the architectural associations toward the recognition by municipal and state legislative bodies of the right of architects to a voice in the framing of laws for the regulation of the general construction and sanitary arrangements of buildings, the American Institute of Architects has done the pioneer work and is entitled to credit therefor. Whatever recognition associated American architects have received abroad has been accorded to the American Institute of Architects by the profession and the technical press of Europe, and the members of the Western Association of Architects may yield this point even when remembering the fact that these efforts made by the American Institute of Architects for the recognition by European architects of our high professional aims and standing, have been ably seconded by the works of many architects not members of that body. In short, we think that the members of the Western Association will, by assenting to a union with the American Institute, and to an abandonment of the name of their own association, be only further developing the enlightened and liberal policy which has distinguished and honored them from the foundation of the Western Association of Architects until date. We bespeak for the coming convention a full attendance of the best elements of the organization, so that its decision to respond to the action of the last convention of the Institute may be that of a good, live, working majority, representative in every respect.

IT occurs to us that, judging from the discussion of the question in the convention of the American Institute of Architects, there may be some controversy in the future in regard to the position of members of state associations who are not members of the Western Association in the contemplated consolidation movement. While the system of admission in most of those associations is similar to that of the national body, this cannot be taken for granted, and the roll of membership might with some propriety be scanned by the members of either national association. In order to avoid any controversy, and that every member of the state associations, or chapters of the Institute, may have a voice in this proposed consolidation, we would strongly recommend that they immediately apply for membership in one or the other of the national bodies. It is not clear to us what the action in regard to state associations may be in this respect, but this plan would certainly place each architect in a position to act in accordance with his convictions. The rules in regard to qualifications for membership in the Western Association of Architects provide that any practicing architect may become a member, but with certain limitations and rules. One is the following definition of an architect:

The status of an architect is hereby defined as follows, to wit: An architect is a professional person whose sole ostensible occupation consists in supplying data preliminary to the material construction and completion of buildings; in exercising administrative control over the operations of contractors supplying material and labor incident to the construction and completion of buildings, and in officiating as custodian and arbitrator of contracts, stipulating terms of obligations and fulfillment between proprietor and contractors.

This was not considered sufficiently secure, and at the last convention of the association a committee upon professional ethics made a comprehensive report, in which the following form for application blanks was established:

To the Board of Directors W. A. A.:188..

My full name is.....

My business address is.....

The name of my firm is.....

I have practiced the profession of architecture for.....years.

The accompanying photographs (unmounted), numbered, respectively, 1, 2 and 3, show completed buildings erected from my plans and under my supervision.

No. 1 is a (here give general description of building, giving also name and address of owner and contractors).

No. 2, do.

No. 3, do.

The accompanying letters, numbered 1, 2 and 3, are from the respective owners of the above buildings, and indorse my character and proficiency.

We, members of the W. A. A., hereby indorse Mr.....'s application for membership. We know him personally; we believe him to be worthy of membership. (Indorsed by two members.)

This report provided for but one date upon which the Board of Directors should meet for the consideration of applications; but there should and undoubtedly will be some provision made for the consideration of applications received in proper form before the coming convention. The initiation fee is \$15, and the annual dues \$5. The initiation fee of members of state associations and the American Institute is waived. Application blanks can be obtained from the secretary of the Western Association.

PERHAPS the strongest reason beyond that of utility that will accrue from the universal use of the standard contract, is in the fact that it establishes a custom. When a case is brought into court, which involves the right of the architect to assume that he is the arbitrator of a contract, or the position of owner or builder as established by the standard form, this custom, in the absence of a statute, becomes a law. The court first looks for the statute, and, in absence of a state enactment, is bound to recognize the custom. If by general use of this form all architects, builders and owners declare their relations to each other to be in accordance with it, without question the standard contract becomes through its continued use, *de facto*, a legal document. The concerted work of the associations in this particular is more important than the formulation of a legislative act governing the practice of architecture, for it at once establishes an ethical standard, and simply by its general use makes it practically valid in the courts.

THE Annual Exhibition of the New York Architectural League will open December 24, according to the circular last issued. It is given in full, as this effort of the League each year to educate and interest the public in architectural work is worthy of the best aid that can be extended by the architectural profession.

SPECIAL NOTICE.

The great success of last year's exhibition, when, for the first time, architecture and the allied fine arts were brought into proper relation, makes it certain that this year's work will be looked forward to with increased expectation. Public interest in the exhibition has been judiciously fostered, and it only remains for every one to whom this notice may appear to do his part in sustaining what is now become one of the great exhibitions of the year.

On account of the variety of exhibits, the work of classification will be difficult. In order to lighten the work of classification, contributors are requested to send a description of the nature and approximate size of their exhibits as soon as possible. The wall space of the galleries is 5,000 square feet, with 500 running feet on the line, and 5,300 square feet of floor space. While these dimensions are such as to rank the galleries among the largest in the city, it is desirable that they may be used to the utmost advantage.

The following jury and committees have been elected and will serve:

Jury.—Richard M. Hunt, Charles F. McKim, Robert S. Peabody, T. P. Chandler, Jr., A. D. F. Hamlin.

Hanging Committee.—Georges A. Glaenger, Charles B. Atwood, George Martin Huss.

Loan Exhibition Committee.—John Gellatly, H. O. Avery, J. P. Riley, C. R. Lamb, H. Siddons Mowbray.

Catalogue Committee.—A. W. Brunner, H. O. Avery, J. D. Hunter, Jr.

The president and vice-president are *ex-officio* members of the jury and all committees.

RULES AND CONDITIONS.

1. The exhibition will be opened to the public on Monday, December 24, 1888, and will continue for three weeks, closing January 12, 1889.

2. The galleries will be open for the press view, by card, Friday, December 21.

3. The exhibition will consist of drawings, etc., not before publicly exhibited in New York, representing as far as possible the present condition of architecture and the allied arts. All kinds of works are admissible, such as architectural designs, perspective drawings, sketches in pencil, pen and ink, water colors, charcoal, etc.; elevations, working drawings and photographs of executed work; paintings in oil or water color of architectural subjects, sketches for interior decoration and furniture, designs and cartoons for stained glass, mural decoration; executed works, such as mosaics, stained glass and decorative stuffs; wrought iron and metal work, sculpture, carving and casts and models of architectural and decorative work.

4. Works will be received only at the Fifth Avenue galleries on the 14th and 15th December, 1888. No works will be received before or after that date.

5. The League will collect and return all works in the city, at the expense of exhibitors, if the secretary is notified when the blank is returned.

6. The blank form attached to this must be filled and sent to the secretary by the 10th of December.

7. A card must be attached to the back of each drawing or exhibit, giving the title, name of exhibitor, the address, and where to be returned.

8. All works intended for exhibition will be at the risk of the owners, except that there will be ample insurance against loss by fire.

9. All rules customary at exhibitions and not above mentioned will be considered to apply equally to this exhibition.

Frames, etc.—All drawings and photographs must be framed or mounted.

Exhibits will be catalogued by title, with name of exhibitor, and it is especially desired that the names of the draftsman may appear; any other data may be on margin.

By order of the Executive Committee: John Beverly Robinson, Frederic Crowninshield, H. O. Avery, Charles I. Berg, A. W. Brunner, Edward H. Clark, J. Gellatly, William Convers Hazlett, J. D. Hunter, Jr., John P. Riley and Frank A. Wright.

FRANK A. WRIGHT, *Secretary*.

47 Liberty street, October 15, 1888.

THE art schools of the Metropolitan Museum of Art, of New York, opened October 1, under auspicious circumstances, under the management of Architect Arthur Lyman Tuckerman, the attendance being considerably in advance of that of past years. The prospectus just issued shows a curriculum embracing in different departments the following branches:

Introductory Class in Object Drawing, Perspective and Industrial Design. By Mr. Lucas Baker.

Drawing from the Antique. By Mr. B. W. Clinedinst, of the Paris School of Fine Arts.

Color, Composition and "Still Life." Drawing and Painting from the "Life." Mr. R. Cleveland Cox, of Bonnat's atelier.

Window and Wall Decoration. By Mr. V. G. Stieperich, of Florence.

Architecture. By Mr. Arthur L. Tuckerman, of the Paris School of Fine Arts.

Sculpture. By Mr. J. Q. A. Ward, assisted by Messrs. F. J. Rey and W. Hunt.

Chasing and Repoussé Work in Metals. By Mons. Julien Ramar, of Paris.

Wood Carving. By Mr. C. Brower, Darst.

Normal Class. By Mr. Lucas Baker.

Anatomy, Physiology and Expression. By Dr. Walter B. James.

Cabinet Drawing and Interior Designing. By Mons. Ernest J. Gilles.

Mechanical Class. By Mr. Wm. E. Volz.

In seeking to meet not only the educational needs of the hour, but with a keen appreciation of those of the future, the management have procured instructors for the different departments from among those most celebrated for skill and knowledge in the different provinces of polite and mechanical art. As such, this as well as other American art schools is deserving of the greatest encouragement, for while it is too soon to expect art to reach the perfection in so new a country as this as it has attained in those that are the product of centuries of art culture, still we have a life and a genius that is all our own, and the greatest possibilities are before the American student, even though his entire education is attained among the lately established yet boldly outlined and conducted theory and practice arising from new needs and conditions.

Originality in Design.*

BY WILLIAM BRUCE MUNDIE.

IT is said that no art can be called progressive that is not an improvement on what has been done before.

To the student of architectural history it must be apparent, that as far as architecture is concerned, it is not an improvement on that of our forefathers; and we are also taught that if we had studied diligently what our forefathers had done and had profited by their experiences, by their failures and successes, we should have long ago outstripped and gone beyond them, and, backed by this historical reference I deduce, that our great fault has been a lack of directness of aim and idea in our design in order to become, apart from anything else, unique, odd and uncommon, or a more fitting modern term, "original."

Architectural design is the result of much thought and invention. The thought given to it is an effort of the mind which receives its stimulus from the present and future pleasure to be derived from the success of gaining an object sought after. Invention is the effect of this thought effort; it throws a new light on the things most abstruse and produces them in order to fit the intended purpose.

So much for design itself. There are two kinds only: good and bad. Good design is an effort reached after a most deep and thorough investigation of material objects which please or disgust the mind of man, and then, by making a studious collection of whatever may so please that mind, shaping them in the proportionate forms of a building.

This is the manner in which the several styles of architecture which we so admire, look up to and endeavor to surpass, were originated and brought to the surface, to sink before our eyes while we struggle to be original.

The necessity for originality in design arises from the fact that it is in the nature of mankind never to be satisfied; the more he sees the more he wants, and the more he has the more he tries to get. If it were not so, then, a building possessing every requisite and convenience in plan and arrangement, of unquestioned stability, no matter how hideous or disgusting to the eye it may appear on the outside, would be all that would of necessity be required in order to constitute a completed structure. But the design of a building is something more than convenience and stability; it indicates to the outside world and to the spectator, that others have been thought of or cared for besides the owner and that the structure was erected not for one alone but it becomes a part of nature and belongs to the world. Therefore it is fortunate for us that man is not satisfied with the necessities and conveniences of life; he looks forward to acquiring more, going beyond, seeking luxuries and admiring the beautiful; thus giving rise to a third essential in architecture, namely, "design," and, any building erected and carried out without thought and study having been bestowed on these three essential points, convenience, stability and design, is not covered by the term architecture at all; it is building; for a structure strictly utilitarian in principle can never be beautiful. A convincing proof of this fact is obtained by looking out of the rear windows of your own house and studying the rear elevations of the houses of those who live in the same block. Everything there, from ash-box in the alley to the top of the wall, is positively offensive to the eye. Thus it must be conceded that design is necessary to fulfill the laws and requirements of good taste.

It is easy, therefore, to perceive that this same prevailing instinct in man, desiring something more than solidity and fitness, would also desire in a greater degree something other than sameness and repetition, hence originality in design, or architecture proper, as I consider the third essential, "design," the highest attainment to which an architect can aspire. A man can construct or study out a plan, and be totally unable to design, but a man who can design in a proper architectural interpretation of the word, can command all three of these essential points; otherwise from that, he approaches the sphere of a decorator, and there is a vast difference between an architect and a decorator. Something more than decoration occupied the minds of the architects of the Old World, who reasoned and thought, constructed and designed, before they decorated.

Originality in decoration has a tendency to aim at extreme novelty; now, there is no harm in novelty; taken by itself it may be beautiful, but without a motive it can never be anything but a fault in architecture proper, and when it is sought after solely for the sake of novelty, it is then destructive to both art and good design.

The constant search after novelty by designers today, is one of the sources of bad taste in our modern architecture, and it is often adopted to save time and study, and thrust upon the public something they barely understand, thus impairing the good taste which the public should be educated up to. Good taste in architecture is a thing of much thought and study; it owes all its value to thought, and it is beyond any man who will not stop to think. He becomes thought-grudging and vulgar; to him pure taste must be utterly unintelligible and almost inaccessible; even his work will show it on the face, expressing a fickleness, affectation and thought-flying hurry.

The hunger after novelty in our architecture is getting to be insatiable, and owners as well as architects appear anxious to obtain it, no matter what sacrifice of truth and cost it incurs. Heaven and earth are racked for something novel, and happy is the man who shall hit off something, no matter how bad, if it will only strike the common taste, "catch on," so to speak, and has what we might term the "run of the season." This is certainly originality, but it is rather of an illegitimate sort, and that which the finished designer abhors, yet has to admit in his dealings with a people who are original if they are nothing else, and who seem to possess a belief which is getting to be too prevalent, that knowledge, skill and taste are inborn in a man, and come by nature, and what may be beauty and excellence in a design is often spoiled and overruled by the owner, who makes no scruple of setting up his own taste against that of the architect, and altering and changing the design at his pleasure.

A certain amount of novelty, or, rather, the searching after it, might be termed original in design, especially in the formation of any new style;

* Paper read before the Chicago Architectural Sketch Club, November 22, 1888.

but a new style is not developed in a day; therefore, novelty is admissible only in a comparatively small degree.

The distinction between novelty and what we call legitimate originality is rather difficult to determine, and what we term legitimate originality is hard to define; but the architect today who catches at the spirit of true architecture, and not that of any one style, and who can successfully combine these two attributes, making a pleasing fusion with the present style in vogue, is regarded as being original, and is likely to be the recipient of favorite commissions; hence the inclination to be original, or counted as such, on the part of the architect; for Americans like originality; they possess abundance of it themselves, and as far as that which pertains to designing the construction of our buildings is concerned, they beat all creation; but too much of their design proper is irrational, and lacking of a definite aim. If there is such a thing as one nation's possessing more originality than another, America should, on account of her mixed population from all parts of the civilized world, each one bringing with him from his native country new ideas, etc.; but, all these ideas, good in themselves, no doubt cannot be put through the mill at once, and we look to time to ultimately accept or reject, and engraft those acceptable into one another, each in its proper place, and this cannot be accomplished without considerable ingenuity and originality on the part of our designers themselves.

It has frequently been asserted that we, in America, who have no past history, should cast off all conventionalism, using no precedent to govern the design of our buildings, thereby forming a style of our own, and of our own materials. Now, while it is not my desire here to approach the hackneyed subject of an American style, I speak of it merely looking toward the great point which would underlie such a thing, namely, originality. First of all, it is against nature, science and art to ignore the past. You cannot do in a day or a generation what has been accomplished in a thousand years; besides, the enlightened people of this country, original as they are, would rebel against being used as subjects for experiment on such a large and stupendous scale; moreover, we do not need any such sweeping change. We are too original now; our design today is too eccentric and erratic, the result, I think, as I saw it mentioned somewhere, recently, by the fact that we are, in a measure, living in a practical age; scores of young men who once intended to enter the learned professions, as they are called, are today leaving our colleges and entering into the practical pursuits, as the vast needs of our time and country demand better attention and educated study bestowed upon our architecture, engineering and science; and the result of the fusion of this vigorous young blood is to be original at any sacrifice.

Still the peculiarities of a few years ago show a more sober and quieting expression; there is a perceptible toning-down effect prevalent in the work today that is more rational and true, showing that we are slowly recognizing the deficiency of truth, thought and reason in aim and idea.

It is in our city buildings that we fail most; our suburban and country domestic architecture is original, beautiful and true, and above comparison with other nations, but there is room for improvement in our city residences, though of late there has been a great improvement in this class; still they lack dignity, repose and expression, more the fault of the owners than the architects, for the owners of our city mansions lack dignity in their manner of living, on account of the immense success of the suburban residence, which retains the charm of American home sentiment which pervades it, and this will be a difficult matter to overcome, if it ever can be accomplished.

Our business buildings are lacking most of those qualities which are so essential to good design, breadth, harmony, repose and continuity of line and surface; and here again the practical age asserts itself; the first story of a many-storied building must approach as near as possible that of a conservatory; the store tenant must have it so, in order that he can make his inartistic display; bay windows, frequently many stories high, constructed on sham principles, are made to project out of the top of the conservatory without any visible means of support other than a *repousse*, fancy copper bottom; nevertheless, the tenant must have it, and there appears to be no help for it but to wait for an uneducated public to learn to appreciate and recognize the beautiful and true consistencies of architectural art. The chances are that we, today, may not see it, but we hope for the future.

How can we become legitimately termed "original"? It is said to be impossible for a designer to produce anything true unless he appeals to nature; it is also an axiom that he can produce nothing new unless he possesses a knowledge of what has been done before. The most original architects are or have been the most extensive imitators, and I think, without exception, that all the men of genius that I have known or read of, whether architects or not, have been assiduous and persistent workers and ardent students of the masterpieces of their forefathers. Take, for instance, the value of the example of the late Mr. H. H. Richardson, who will not be charged with any lack of originality, yet his whole life was a personal exemplification of the foregoing facts. The value of Mr. Richardson's example also lay not in the style he chose but in his power to adapt it to the qualities of design at which he aimed, in other words, the use he made of it in his untiring efforts to express certain high qualities in design which others had neglected, and when once he found them he steadfastly adhered to his convictions.

Today we haste to imitate his most common features, details, etc., which appear most in different places, altogether ignoring the breadth, subordination, simplicity and repose peculiar to his work; and the aim and idea which is apparent to one who strives to fathom the measure of his liking for his style.

In connection with originality Sir Joshua Reynolds says: "He who resolves to search no mind but his own will soon be obliged to imitate himself." He also states, regarding invention: "Invention, strictly speaking, is little more than a new combination of those images which have previously gathered and deposited in the memory; nothing can come of nothing; he who has laid up no materials can produce no combinations."

Therefore, the more extensive our knowledge is of the works of others who have excelled in their art, the more extensive will be our own ideas and inventions, and the more original will be our conceptions.

Sir George McFarren, in his last address to the Royal Academy of Music, gave the following advice to students and young composers. I do not quote his exact words, as it pertained to the composition of music, but the main ideas are applicable alike to the young composer and the young designer, therefore, I take the liberty to insert the word design for that of compose, and reconstruct a few sentences, but let every young aspirant in design think thoughtfully over them.

"Those who design must make mental studies; it is not to occasionally design a piece of furniture, or an elevation, but to have a constant habit of constructing things, of planning arrangements and exercising the faculty of invention and design, for it is never in the career of a designer to say 'I have finished.' It is the constant seeking advancement which is the real means of developing the faculties wherewith nature has endowed us all. In order, therefore, to master the art fully, and to do justice to the productions of present times, they must have a knowledge of the works of preceding periods. Let them work at the productions of the masters of former times and then see the productions of their own. They will then have the conviction that originality can only find its proper expression when they have commanded, by constant exercise, such power over their faculties as would enable them to produce that which is in themselves."

Thus it will be seen that to study the ancient styles is indispensable. By study I do not intend that we should make exact copies of the works of the ancients, but study the why and wherefore, the reason and motive for adopting this feature, and that feature, which, should you adopt it at all, you would so modernize it that everything except the aim and intention would wear a changed appearance. This manner of study will give us sufficient knowledge of the forms of the past, and will teach us to use their principles and not their forms, for the customs of the people and the age in which we live dictate to us and resolve into shape the form of a building we should erect.

I think also that a knowledge of the styles of the past is desirable in order that we may perpetuate and modify those architectural forms given us adapting that which to us may appear best to our present requirements, considering how to make the most possible and most rational use of that which is handed down to us, and blending it with that which our own age, knowledge and materials supply us, for changed materials in the past few years have altered our whole system of construction and utility, and in architecture, as in other arts, two things must always be borne in mind;—the intention, and the materials used to express and carry out that intention.

It would certainly be the height of folly to ignore and cast aside all that which has been handed down to us by those, who, in their day, thought almost entirely for themselves. They did not receive weekly or monthly, several technical journals, etc., each exhibiting plans and designs of everything constructible under the sun, and here lies an open question; whether it would not be better to make us depend more on ourselves, thereby forcing us to bestow more thought and study on our designs, if we did not receive so many of these ready-made ideas? It would certainly be cultivating true originality on our part.

The man who gets an idea from an ancient or even a modern architect and designer and so engrafs it into his own work that it becomes harmonious throughout can hardly be charged with plagiarism, nor should this use or adaptation of the actual designs of others be accounted an architectural sin, for it may frequently happen that two inventive minds may run along in almost the same channel affording almost similar results; yet each totally ignorant of the doings of the other. Before leaving the question of imitating the ideas of others, let me add that the great success and value of this borrowing does not lie in the exact copy or correctness of imitation, but it depends greatly if not entirely on the designer and on the headwork he displays with the breadth of generalization that accompanies it; for that which simply imitates without generalizing, even though the model possess many excellencies, does not approach art at all; and it might be well to pause here and note this fact, that nothing but good examples should be used for the purpose of study, otherwise originality is less to be hoped for in each succeeding age, for a designer will reproduce something of the works through which his studies have been made, imperceptible though it may be at the time to himself. It may also be said regarding the study of the examples of others, if a thing is good, is it not too good to be given up? If so, is it not too good to be caricatured and abused, or, in other words, if it is worth copying at all is it not worth copying completely?

Yes; but this can never be done without copying also its construction, and how often will this somewhat out of date idea work in and adapt itself without any alteration whatever and fill the place completely? Never; as long as our modern habits, materials and means keep changing; and the same applies to design or style as well as construction. The rest of the building is laid out on a modern basis; then the feature, good in itself in every way, and in its own position from whence it came, will become hideous and out of character with the rest of the work.

The old styles are and perhaps ever will be imitated, as by far the greater number of our works today are based upon imitations; but the designer must go with the spirit of his own time or else be able and strong enough to lead it, for the period of style in which we live not only makes the designer as much as he makes the period, and when I say the spirit of his own time I do not mean the prevailing fashion, fads and eccentricities that are prevalent at that time, though to some today this appears to be all important, and any new publication by architects of reputation or any work of decoration in process of execution from their designs is eagerly sought as a source of present profit and considered more valuable than in the end, being led to a fuller sense of the beautiful and true at the expense of attaining facility, readiness, and being well up with the prevailing fashion in which he lives. Architecture does not consist in a series of fads, fashions and erratic novelties, each having its own successful run to die a death and pass into oblivion; it is something higher and nobler, expressing in materials ideas which have truth for their beginning and ending.

We should aim at catching the true spirit of architecture, and not that of any one style, much less a fashion of the day, which depletes our stock in

trade at the end of its questionable run, finding that we must begin over again, starting on a new tack, cruising round with a weather eye bent on the doings of others, hoping to pick up some clue or purpose that would help solve the problem; still, at the same time, this quality, this searching the doings of others is of considerable importance and not unattended with benefit to the searcher, as I think every reflective man should post himself on the doings of others who are coworkers in the field for and against him, endeavoring to get at all sides of the case, holding himself as an umpire, forming his own opinion of its merits and passing judgment upon it. We become in design akin to our politics and religion, prejudiced, and all in favor of one style or period, and stand still by it until others have left it and gone off onto something else which is more taking, then we are at sea with ourselves unless we possess that knowledge of what has been done of the kind before.

Should we possess this knowledge, then is the time to adopt the new, adapting that which is rational and fit and applicable, avoiding peculiarities and eccentricities of style at first, though this will be found difficult to do, as it seems born in the nature of imitators to seize on the most salient points of good or bad design and exaggerate them. Peculiarities in design and style are generally defects. It is by peculiar features that we distinguish one style from another, and it is by these peculiarities that anyone will recognize the style at first sight and which any mechanic may copy, that mislead and cause designers to veer round from one thing to another without showing any search for the real excellencies of the style; these lie deep below the general first glance and require considerable thought and study to enable one to eliminate them, not to speak of adapting it to fill a certain requirement in what we term a more modern style.

This imitation of peculiar features in design, which are oftentimes inessential and mistaken for beauty, will most often appear in the work of a designer who has one favorite master, and even though he choose the best work and is capable of discerning good from bad, will never obtain in this way what we would call originality in the mastery of his art.

Slightly new features, however, can be introduced into our designs with considerable success, providing the new can be fused with the old in a legitimate manner; and the monotony of our work becomes somewhat relieved in this way, but, if this new element is too new and foreign, it becomes difficult to fuse with the old, our eye seeming equally to hate too wide a deviation as well as no deviation at all; or, in other words, if any one gives us a new idea, which is not too far ahead of us, such an idea is often of great service to us and may help to give new life to our work; in fact, we soon fall back unless we more or less frequently come in contact with new ideas and are capable of understanding and making use of them; but, on the other hand, if these new ideas are too new and too little led up to they put us out with every degree of completeness.

After all there is no better foundation for good design than the act of searching for the principles which govern it, and when found by steadfastly adhering to them; there is no other royal road to it.

Beauty of form should first be sought after and acquired and then the leading lines decorated. No amount of effective ornament, original as it may be in itself, will ever make an original and good design, though few architects seem to acknowledge this either in practice or theory; the rule that the greater should regulate the less, should follow in a building; the building blocked out roughly should regulate the design and ornament, and also all which it contains; furniture and decorations should all conform to its characteristics, thus giving a proper uniformity of style and design throughout and a subordination of all inferior objects to those of greater importance, giving a broad and widespread sentiment, which I am afraid in our times is wanting, for how many people, and wealthy people, too, erect their houses with rooms totally incongruous in character the one to the other, the same applying to the furniture, etc., till the house is like a museum, showing a vulgarized taste and a false belief of beauty and uniformity, for unity of design, style, and decoration of all things that are parts of a whole are indispensable to true taste.

Let us take, for instance, the case of the general client of today. I may say there are some exceptions to him for which we are truly thankful. He enters an architect's office and starts the conversation by stating his wants, desires, etc., in regard to the future house.

His greatest want invariably is to get the house for half what it will surely cost him. His next want is to design the house from within, and in this he has an able second in the personage of his wife, or daughter, as the case may be, sometimes both, and oftentimes several more. He proceeds by jumps of one room at a time, without any general or definite idea of the whole. He wants the hall like Mr. Someoneelse's hall, the dining-room like that of some other house, and so on, utterly regardless of anything else but to have them just so, and nine times out of ten when he gets it that way it is not what he wants at all; it is but a taking fancy of the moment, and he allows it to mislead him without thinking it over seriously, for when completed, Mr. Someoneelse's hall and Mr. Otherhouse's dining room are entirely of a different plan and feeling from each other, and so on throughout the house; they were all designed by different minds on different principles, probably the hall from a sea-shore cottage, and the dining room from a city mansion; but no matter, they pay their money and they must have it. Thus the architect receives his idea of the future house, from basement to roof, and he makes his plan accordingly.

Then he is confronted with one of the meanest tasks which can be imposed upon a designer who takes any pride in his work at all, namely, to design an exterior to fit the plan as laid out, a scheme as ridiculous in principle as making the window openings to fit some old sash that may be on hand. The whole house has been designed from within, without reference to the multitude without; the man without is confronted with a flat, featureless, pile showing lack of thought and study, the salient corners and the recesses of the given plan forcing upon the public an eyesore to which they must become accustomed, and thus the general taste and culture of the masses is undermined, and all for the sake of one "must have it" individual, who, let him live in his house ten or fifteen years, will probably tear out and alter anew the inside, but the outside swears on at the public for a quarter of a century.

On the other hand, you may say, who will occupy this house when finished, the owner or the spectator? Is it not the owner's privilege to do as he pleases, to so plan his house as he wishes? Certainly it is he who owns the inside and nominally the outside, let us grant him that, but, the public are entitled to some consideration, for every man born in this world owns his just share of this earth as nature designed it, and no one has any right to artificially despoil her. It is the duty of the owner to consult the observer, to erect what will not prove an eyesore and a nuisance to the general public. Thus it is that the best ornamental detail, feature and design is not only required but really demanded by the laws of nature and taste, and it is by the abominable treatment of these laws that we have so much of, what I term, enforced originality in our architecture today.

This forcing upon the designer set and rigid requirements is not only bad in itself, but leads to others; he sees the hopeless task before him and sets to work on the next best thing by sticking on ornament wherever there is a place for it, usually where it will be most conspicuous, not where it will most improve the building; but this deception is thin. No one is so easily deceived. You cannot hide the want of thought and study by any amount of ornamental frippery; in fact, it is rendered all the more offensive by adding ostentation to it. This the observer does not want. He cares not for ornament, which shows that the owner possesses so much money, but he does care for the owner and for the owner's consideration bestowed on him. Nothing short of this will satisfy the spectator. Show him by thought and study that his wants have been considered.

Of course, I do not wish to imply in these foregoing remarks that ornament is not essential to beauty; quite the contrary.

It is really a natural want. The rudest savage shows some affiliation for it, but as some men today buy and wear their jewelry a size larger than anyone else, it is so with a great deal of imitative ornament—always a size larger than our neighbors; more imprudent than the true thing, exciting our contempt by the meanness and vulgarity it displays on the building it is intended to adorn. See how nature ornaments and decorates herself; there we may learn something of restraint and be warned against over-ornamentation; just see how she restricts her true ornaments (the flowers) to the most telling and culminating points of plants, sprinkling them sparingly and contrasting them with a vast expanse of foliage, while we, by the many artificial aids, strive to force her to the opposite by demanding more ornament than background.

Seeing this, should we not liken unto nature our great and only teacher, follow her dictates on this point and concentrate ornament, leaving wall spaces intact?

Before leaving this point of ornamentation I wish to make more clear a foregoing statement, "that ornament is essential to beauty," by saying that at the same time it is not always necessary; for strip a house of its ornament if it is still in harmony, if it still retains its pleasing proportions, it is not necessary that its ornament be restored; but, if restored, it will not be added in vain, provided it be properly placed and consistent with the style and character of the work; if it is not pleasing when stripped of its finery, then no amount of ornament can atone for lack of design and proportion.

In conclusion, if any views of practical value are herein advanced, if they be admitted as worthy of discussion at all, appear to me to be of value as regards the betterment of the profession individually and collectively.

First, we grant the public the right to demand beauty and truth in our buildings, and does it not then become our duty as architects and designers to endeavor to educate the public to recognize this beauty? educate them to the idea that architecture is the highest art?

We also see the folly of designing novelties on too large a scale, and of not making them at all. We see that new ideas cannot be fused with old, save gradually, and by patiently leading up to them in such a way as to admit of a sensible continuation or identity between the old and the new, even nature wishing to take her own time. I have also pointed out that our great architects, musicians, poets, etc., owe their distinctions more to assimilation and fusion of all the good that has been done up to, and especially near about their own time, than to any very great and startling steps they themselves may have taken in advance.

Also, that we should borrow from every style, from every era, and from every form, in order that we may, in time, become original in ourselves.

Therefore, let us step forward and take advantage of what has been done before, find out if we possess any of this assimilating power, this power to adapt and complete the fitness of things, not only for our own benefit or advantage, but for the future of a nation, whom I hope in the not far distant years will hold the proud distinction, architecturally, in comparison with other nations, that she does politically, commercially and otherwise—the grandest on earth.

THE Consolidated Temperature Controlling Co., of Minneapolis, Minn., is putting an electric device on the market which is bound, seemingly, to become as common in dwellings and business houses as furnaces and steam-heating apparatus. It consists of a thermostat, or mechanical thermometer, which controls the action (opening or shutting them) of the furnace dampers, or steam coil gauges, by means of a "spring motor" attached to them, having its connection therewith by means of electric wires from an open circuit battery, and by this means it is possible to maintain a uniform temperature automatically, it only being necessary to settle upon that degree by fixing the indicator hand of the thermostat upon it. In the case of steam heat, a "steam switch thermostat" has been provided with a clock-like component, whereby different degrees of heat may not only be maintained in different parts of a house, but different degrees of heat at different times of the day or night, as the clock may be set for 40° during the night up to 5 P.M., after which 75° may be the output of warmth. The device is said to be comparatively inexpensive, and a great fuel saver.

Interior Decoration.

BY WILLIAM MORGAN PETERS.

A RECEPTION ROOM.

OF the numerous styles of design applicable to the treatment of a reception room, the Colonial is one of the most pleasing and satisfactory, combining, as it does, the severe and studied simplicity of classic form and motif with a delicate and distinctive grace, and daintiness of detail. As one of the first principles of design is adaptability to requirements, the use to which the room is to be put should determine not only the practical essentials of convenience and utility, but also the impression which is to be made on the minds of its occupants by their surroundings, and this impression should coincide as nearly as possible with the thoughts and objects which will be uppermost in their minds. Now, as such a room is devoted to the formalities of society, the treatment of its design should be, as a whole, formal and of studied simplicity. Any attempt at display or indulgence in eccentricities of design, either in wood finish, furniture, hangings or decoration, any violent or startling combinations of color, any pictures or bric-a-brac sufficiently conspicuous and out of keeping with their surroundings to attract immediate attention, would be evidences of bad taste and want of study in the effect of the whole. The introduction of any such incongruities would, in cultivated minds, excite comment similar to that caused by a showily or eccentrically dressed woman. Such comment would be ridicule, and what is so detrimental to the peace of a sensitive mind as this degrading possibility.

Our reception room should consequently be, more than any other room, a harmonious whole, a dream of perfection; for it is here that we declare our taste and education to the world. If it is otherwise, the conception has been a failure, and the visitors will not find that appropriate but formal ease in their surroundings which the occasion demands. It is infinitely better to make no attempt whatever at treatment than to give cause for merited ridicule, unmerited ridicule serving only to show the ignorance and presumption of the would-be critic. A rich, pleasing and, above all, general effect should be the first impression conveyed to the mind on entering the successfully treated reception room, the whole scheme being so carefully studied that no one thing should be given undue prominence, but everything should participate in and be subservient to the effect of the whole, and then this effect will have the refinement and charm of a fascinating and cultivated woman dressed in perfect taste. Great care should be taken to produce the exact shades of colors desired, and it is important that those selected should be becoming to the mistress of the house, for if otherwise, she will appear at a disadvantage and out of place with her surroundings just when she should feel and appear at her best. The most satisfactory results can be obtained by the general use of one or two colors at most, but these can be produced in two or more shades which, however, should vary but slightly. The foregoing remarks apply only to rooms which are devoted chiefly to formal social life. Many so-called reception rooms are used for various other purposes as well, which would involve the consideration of other impressions to be expressed in the treatment of design, together with other practical essentials.

We will now consider a particular example illustrating the ideas herein expressed. This room is in the residence of Martin A. Ryerson, Esq., on the Drexel boulevard, Hyde Park, and, with its immediate surroundings, is shown on the accompanying plan, from which the convenience of its position is evident.

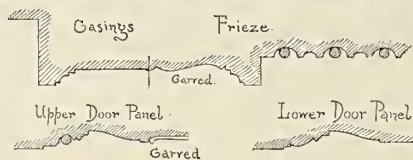
On another page are elevations of the north and south sides, showing treatment of room and furniture. This room is about fifteen feet square, with the four corners rounded, and the wall

coving into the ceiling with a curve of about nine inches radius, having no molding at either intersection with the flat surfaces. The inlaid floor is highly polished and has a border of prima vera and satin wood, with the center in strips of the former wood two inches wide laid vertically in each wall, and mitering at angles, as per sketch.

Prima vera is a beautiful golden yellow species of mahogany which is used to quite an extent on the Pacific coast for fine interior finish, and is now being introduced here. The wood finish of the room is made in cherry, which is enameled with seven coats of a rich cream color and polished to a dull egg-shell gloss. Cherry is greatly superior to pine or white wood for enameling purposes, the grain being so close and the wood so hard that all moldings and detail, no matter how fine, are sharply and clearly produced, and the chances of denting or disfiguring in any way by constant use are greatly lessened. As the drawings show clearly the treatment of the woodwork, only a few general remarks are necessary to make them understood. All moldings and details are of the utmost delicacy; both door and window casings are four and one-half inches wide, and as shown on drawing of sections, the sinkage being but one-quarter of an inch.

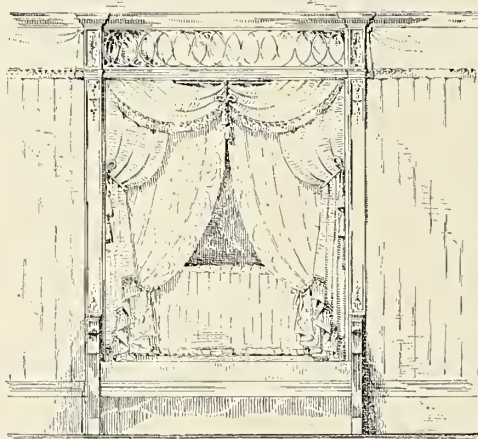
The section of door panels is also shown, together with that of the frieze. The carvings are mostly composed of the acanthus leaf, rendered

quite flat, with an extreme projection of but three-eighths of an inch, those of garlands only having conventionalized flowers and leaves, all executed with the utmost delicacy, edges being sharply and clearly defined, but in no case having a projection of more than one-sixteenth of an inch, the high light edges and surfaces being daintily touched with silver throughout. The portion of frieze over windows is a transom light of silver



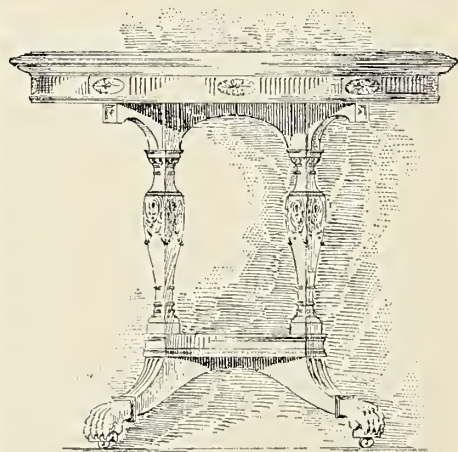
leaded pink and cream colored opalescent glass, on the same plane with walls of room; below this is a silvered rod, with rings for draperies. The walls are hung with a warm shade of rose pink silk, perfectly plain, in vertical pleats about four inches wide. This silk is secured in place by hooks and eyes, and can be taken down, cleaned and put back again with but very little trouble. Just below the wood cornice is a valance of the same silk, divided into sections by narrow pipes, placed at equal intervals, the head of each hanging down and being slightly crushed. The valance is cut to hang in slight creases, but its lower edge follows around the room in a perfectly straight line, and is bordered by a cream-colored silk fringe two and one-quarter inches wide, corresponding to the epistylum over doors and windows. Just back of this fringe is a silvered picture rod, supported by hooks which screw into the walls, its surface showing at intervals through the reticulations. The window draperies are

as per sketch, the heavy ones being of figured satin damask, in the same rose pink as the wall hangings, but a shade darker, with cream-colored silk fringes, tassels and linings. A pair of rich lace curtains and a sash lace on silver rods subdue the daylight to the desired tone. The ceiling cove and that portion of walls above the cornice molding (for sketch see illustration pages; see also small sketch on this page) are treated in five coats of oil color on plaster,

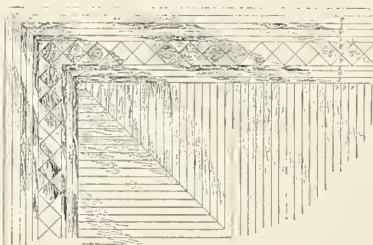


Window Draperies and Seat
W. Morgan Peters, designer

rendered in clouded effect, commencing at the cornice, in rose pink, grading lighter toward the ceiling, and finally to a cream color beyond the ornament on ceiling, the clouding being in cream and pink, very light and filmy, and irregularly introduced. At the intersection of cove and ceiling are two strands of braid in carton pierre, forming a framework on which to base the decoration. This braid comes down over the cove at intervals in two intertwining strands, and the intermediate spaces are filled by garlands of conventionally treated flowers and leaves, also produced in carton pierre, not over three-eighths of an inch in relief at the highest portion, and all modeled with great delicacy, both these and the braid being daintily silvered on high lights. Festoons of small discs hang above and below each garland, and acanthus buds and sprays spring from intermediate loops of the braid, flowing out onto ceiling and down onto cove. The ornament is mostly in cream color, although where the clouding happens to be cream it has a very light pinkish tone, and is in some places hardly distinguishable from the ground color; the whole treatment has a dreamy, atmospheric effect, impossible to describe and difficult to attain. All ornament is, of course, produced without any shadowing or attempt at false relief, as under no circumstances whatever is such a treatment allowable. The furniture is like the finish, made in cherry and enameled in a rich cream color. It consists of the following pieces: A window seat about six feet long, the end elevation of which is seen at the right hand side of the south elevation of room, having a cushion six inches thick and a large detached soft pillow, the edges of both being finished with a cord, which on the cushion is made into corner knots. A light divan five feet long, two arm chairs to match and two reception chairs complete the seating capacity of the room. The bottoms of all legs are shod with small silver boots, having casters on the front and rubber bearings on



Elevation of Table



Design for Floor

Sketch 1st & 2nd
J. H.
P. Morgan Peters
S. S. Morgan Peters

the back legs to prevent too free and easy a movement of the articles over the polished floor. All seats are upholstered plain, that is, not tufted, and the coverings are of figured silk tapestry, worked with bunches of flowers and leaves in delicate shades of dull blue, pink and green, on a light cream ground, the goods being mostly ground and showing very little of the other colors. There is a center table elliptical in shape (see small sketch) and not as shown on south elevation. This table has silvered claw feet, and a Mexican onyx top of rich creamy tone. The cabinet shown on the left-hand side of sketch representing the south elevation of room, has clear plate glass, with silvered leads in doors and sides, a French plate mirror back and three plate-glass shelves, the piece being finished equally well both inside and out. All this furniture has the most delicate possible details of moldings and carvings, and is daintily lined and touched with silver throughout. Two large white bearskin rugs form the only floor covering.

Government Draftsmen and Engineers Wanted.

THE following notice of examinations to supply vacancies in the offices of the supervising architect and of the quartermaster-general, war department, has been received from Mr. John F. Doyle, secretary United States Civil Service Commission:

The Civil Service Commission has provided for a series of examinations for the purpose of filling vacancies in the office of the supervising architect of the treasury department, and in the office of the quartermaster-general, war department. These examinations will be held in Washington, New York City, Boston, Chicago, and St. Louis, commencing on November 19, and continuing to and including November 22. The examination for each position will continue for two days, as follows: Applicants for the position of architectural draftsmen and civil engineers of the quartermaster-general's office, and those for the position of architectural draftsman and sanitary engineer of the supervising architect's office, will be examined on Monday and Tuesday, November 19 and 20. Applicants for the position of expert in metal construction and those for expert in heating and ventilating will be examined on Wednesday and Thursday, November 21 and 22.

Applicants for the position of architectural draftsman in the quartermaster-general's office must possess a knowledge of construction and designing of ordinary dwelling houses, a knowledge of building material, and ability to prepare working drawings and specifications. Applicants for the position of civil engineer, quartermaster-general's office, must possess a knowledge of constructing roadbeds, bridges, trusses, etc., of surveying and draining, of sanitary matters in constructing ordinary dwelling houses, and of the strength and use of materials.

Applicants for the position of architectural draftsman in the supervising architect's office must possess a thorough knowledge of architecture, with the ability to design and construct public buildings, to calculate the strength of materials and structures, and to make detailed drawings, etc. Applicants for the position of expert in metal construction must be good constructors, able to calculate resistance in roofs, trusses, beams, girders, columns, etc.; and to prepare working drawings. Applicants for the position of sanitary engineer must possess a thorough knowledge of plumbing, and be able to make plans for the drainage of large buildings and grounds. Applicants for the position of heating and ventilating expert must possess a thorough knowledge of steam, hot-water and hot-air heating systems, and must be able to prepare plans for heating and ventilating buildings.

Persons desiring to take any of these examinations should apply to the United States Civil Service Commission, Washington, D. C., for blanks on which to make application.

Applicants must provide themselves with a complete set of drawing instruments, a drawing board not smaller than 16 by 21 inches, a square and triangles, a scale, and India ink.

Persons whose legal residence is in the District of Columbia will not be admitted.

Building Inspection in London.

PROPOS to the present discussion regarding proper building inspection, the following letter to the *Philadelphia Ledger* is worthy of notice:

Mr. Editor,—There has of late been a good deal of discussion as to the loose manner in which the building laws of Philadelphia are enforced. It has been shown that, mainly in consequence of there being too few building inspectors in the city, those laws are frequently not respected.

Will you permit me to suggest that the system of appointing building inspectors, not only in this city, but elsewhere, may, to some extent, cause the trouble. It is well enough to insist that the men who are to overlook the construction of new buildings shall have practical experience, but the possession of that knowledge only forms a part of what is required. If the duties of the building inspectors comprised nothing more than the enforcing of the employment of good materials and workmanlike construction, the practical knowledge of the carpenter or bricklayer would meet the case. There are, however, cases occurring every day where a knowledge of the scientific principles of construction become necessary and where tests have to be made that can only be properly done by a man who has all the knowledge and experience (outside of the artistic portion) which a competent architect and engineer possesses.

Under these circumstances it would seem that the plan of appointing building inspectors in use in England might be adopted here with advantage. In London, for example, the system is to divide the whole city up into sections and to appoint by election of the "Board of Works," the local building committee, a practicing architect to see that the building laws in each section are enforced. The builder has to pay a fee for every new building or alteration to an old one, to this architect, or "district

surveyor," as he is called. The advantages of the system are that no new building or alteration is carried out except under the supervision of the district surveyor, it being to his pecuniary advantage to see that in no case is the payment of fee evaded. The fees are high enough to make the position quite lucrative, and some of the best architects in London act as building inspectors.

A. S. J.

Correspondence.

Editors Inland Architect:

CINCINNATI, November 2, 1888.

Inclosed you will find another of those competition circulars; the fact that it is printed would tend to show that everybody gets one.

Notice the peculiar wording of the second paragraph, the princely (?) compensation offered the "successful competitor" who is not to be the architect unless "demanded," and then "at the usual rate of compensation" in addition to the aforesaid compensation offered for sketches; but it is evident they intend to get even on the supervision, as they propose to make a bargain for that.

Another peculiar feature of this competition, which does not appear in the circular, is that two architects were invited personally to make sketches, and were at work on them before the circular was sent out.

It is to be hoped that the architects (hard sound on the "ch") of Cincinnati will refuse to enter into this competition on the terms set forth in the circular; what others may do matters not.

Respectfully,

WALTER R. FORBUSH.

CINCINNATI, October 29, 1888.

DEAR SIR,—You are invited to prepare, and submit to the Board of Trustees of the Mt. Auburn Presbyterian church, sketches (as elaborate as you may choose to make them) for a stone church edifice, to be erected on the present church lot on Auburn avenue, to cost not more than \$40,000 complete, including pews, upholstery and hot-water furnace, and to contain an auditorium having seating capacity for 600, Sunday school room for 500, infant school room for 300, Sunday school library room, pastor's study, ladies' parlor, serving room, kitchen, two water-closets; such sketches to be submitted on the following conditions, viz:

No compensation to be paid to any but the successful competitor. The successful competitor shall receive as a premium \$200 for his work, and shall be ready to enter into a contract with the said trustees to furnish full plans and specifications, if demanded by them, at the usual rate of compensation for such work, and to superintend the erection of the building, if requested so to do by said trustees, at such compensation as may be agreed upon.

Those intending to submit sketches will notify Geo. K. Thompson (office, No. 82 W. Third street) not later than Saturday, November 3, 1888, and will deliver their sketches sealed up to same person not later than 4 P.M. on Monday, November 12, 1888.

The trustees reserve the right to reject any and all sketches.

Respectfully,

THORNTON M. HINKLE,
LOUIS E. MILLER,
GEO. K. THOMPSON,
Committee.

Our Illustrations.

Reception room for M. A. Ryerson, Chicago; Wm. Morgan Peters, designer.

Connected residences for John Norton and J. B. Bartholomew, Topeka, Kas.; L. S. Buffington, architect, Minneapolis, Minn.

The Stevens Building, Chicago; Pond & Pond, architects; 40 by 80 feet; seven stories; the first and seventh to be occupied by the W. C. Stevens art store and gallery, the remaining stories divided into offices, singly or in suites. Blue Bedford stone, Anderson Roman brick, copper bays and roof, hardwood floors and trim, steam heat, passenger elevator, plumbing fixtures, fireproof vault stack; cost upward of \$75,000.

The "Bee" building, Omaha, Neb.; S. S. Beman, architect, Chicago. First and second stories, red Waupaca granite; balance of building, brown brick and terra-cotta. Building entirely fireproof construction; iron beams and tile arches; finish, all quartered white oak. Size of building, 132 by 132 feet. There is a large square court, treated elaborately with arches, columns and ornamental plastering, and polished granite. Building to be occupied in great part by the Bee Publishing Co.

The Brownell school building, Perry avenue, between Sixty-fifth and Sixty-sixth streets, Englewood, Ill.; M. L. Beers, architect, Chicago. Size, 150 by 68 feet. The material used in its construction on the exterior is pressed brick, terra-cotta, galvanized iron and slate. On the interior the finish is of quarter-sawn sycamore, and the floors to be of maple. In the construction of the building, extreme care has been taken to make it a perfect modern school. Particular attention has been paid to lighting, ventilation and heating, and also special attention has been given to the location of the building regarding the points of the compass, so situated that all the rooms in the building will have some light during the day. The building is also provided with the dry-closet system.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

Residence for Matson Hill, 2323 Michigan avenue, Chicago; W. W. Clay, architect.

Residence of Benj. Allen, 1815 Michigan avenue, Chicago; Cobb & Frost, architects.

Residence of J. W. Brooks, 4910 Woodlawn avenue, Chicago; Thos. W. Wing, architect.

Residence of H. M. Dupee, 4820 Woodlawn avenue, Chicago; Andrews & Jacques, architects, Boston, Mass.

Residence of Charles Counselman, Fifty-first street, corner Greenwood avenue, Chicago; Burnham & Root, architects.

Residence of M. A. Ryerson, northeast corner Forty-ninth street and Drexel boulevard, Chicago; Treat & Foltz, architects.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 21, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1889, at Philadelphia. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the second Monday after the first Tuesday of every month. Annual meeting, November 19, 1888. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next meeting at Rochester. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1889, at Dayton. F. J. Otter, Dayton, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. G. M. D. Knox, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October in each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. G. W. Williamson, secretary. Annual meeting, November 5, 1888.

ARKANSAS SOCIETY OF ENGINEERS, ARCHITECTS AND SURVEYORS.—Second annual meeting November 22, 23 and 24, 1888, at Little Rock. A. G. Gibb, secretary.

ARKANSAS SOCIETY OF ENGINEERS, ARCHITECTS AND SURVEYORS.

The second annual meeting of the Arkansas Society of Engineers, Architects and Surveyors will occur at Little Rock, November 22, 23 and 24. Some fifteen papers upon subjects ranging from "Concrete in Construction" to "The Uses of the Plane Table" and "Description in Deeds" have been promised by members, and though the body has a more general diversification in regard to professions than is usual, it seems to be organized for work of the most practical kind.

CHICAGO ARCHITECTURAL SKETCH CLUB.

The fifth annual meeting of the Chicago Architectural Sketch Club was held November 5, President George Beaumont in the chair.

The meeting was the most enthusiastic of the year, and almost every member was in attendance.

The following officers were elected:

President—W. G. Williamson.

First Vice-President—W. B. Mundie.

Second Vice-President—O. C. Christian.

Secretary—C. A. Kessell.

Treasurer—E. J. Wagner.

Executive Committee—F. L. Linden and T. O. Fraenkel.

Suggestions were made regarding syllabus for the coming year, a draft of which is in the hands of the executive committee for approval.

The affairs of the club are most prosperous, and the executive committee and treasurer's reports showed the club to be progressing in membership and financial support.

The annual banquet and exhibit of drawings will be given November 19. The exhibit will remain open two weeks, and a cordial invitation is extended to those interested to visit the club rooms during that time.

A Revolution in Church Bells.

AN exhibition of Harrington's patent tubular bells was given at Providence, Rhode Island, by Walter H. Durfee & Co., of that city, on October 4 and 5. It was the first exhibition of these bells ever given in the United States, and was largely attended during the two days, enlisting special attention from prominent architects, builders and churchmen. Messrs. Durfee & Co. have secured the exclusive right to manufacture these bells in the United States, and will at once build a large factory for that purpose. The construction is very simple and the bells are easily placed in position. They are arranged in "rings," or chimes, of eight, ten and thirteen bells, and the number may be increased to twenty-four. They consist of a series of metal tubes suspended from a simple framework of wood—the bells or tubes ranging from 2 to 10 feet in length and from 8 to 10 inches in circumference. They have the advantage of great economy of space as well as of cost, a chime of eight to twenty-four bells, with the framework, not occupying a space of more than from 5 to 10 square feet. The bells are struck with hardwood-tipped hammers at the upper extremity of the graded cells, the hammers working on levers to which are attached cords, falling to any required length, and but little muscular force is required to manipulate them and call forth the purity and sweetness of their tones. The effect produced is that of a full church chime, and their clearness and volume of tone is such that every note can be easily distinguished within a radius of more than a mile. The labor of manipulation is so much less than with the old style of bells that it is much easier to ring them in "correct time." The vibration is confined almost entirely to the tubes, and therefore they can with perfect safety be placed in even a weak church tower or in one not specially constructed to receive a set of bells. With so many strong points in their favor, it would seem to be but a question of time when they shall largely take the place of old style cumbersome bells.

But there is practically no limit to the uses to which these bells may be put. They can be called into requisition in theaters, concert halls and public buildings, as they range in all sizes, from those described down to little sets of silver bells that might be placed on a small center table. This is more particularly shown in the large number of elegant hall clocks manufactured by Walter H. Durfee & Co., provided with a set of these tubes, which every quarter-hour play a mellow chime of sweet music, the hour stroke being made on a tube of different pitch and pleasing tone. The clock tubes have been made in this country, but the church-chime cells have been manufactured only in England, because up to this time it was not possible to draw such large tubes here; but now that Walter H. Durfee & Co. possess the sole right in the United States, they will commence the manufacture of the largest caliber of the Harrington Patent Tubular Bells.

New Publications.

STAIR-BUILDING IN ITS VARIOUS FORMS. By JAMES H. MONCKTON. New York: John Wiley & Sons.

This very elaborate treatise, intended for the guidance of practical stair-builders, sets forth the one-plane method of handrailing as applied to drawing face-molds, unfolding the center line of wreaths and giving lengths of balusters under all wreaths. This work is, we believe, the most comprehensive work yet issued on the subject, and covers the whole field of stair-building. It is fully illustrated, the figures are placed opposite the text which they illustrate, and practical plans are worked out for many sorts of stair-cases, covering all the problems likely to arise. The text, while by no means free from bungling circumlocutions and occasional inaccuracies of phrase, is sufficiently plain to offer no serious difficulties, and the whole subject is handled in a manner which should bring it within the reach of anyone who is willing to make the effort necessary to gain the mastery of any mechanical art. There are numerous designs and plans of stairs, newels and balusters, which will be of service to stair-builders, carpenters, and perhaps to architects. It is hardly necessary to speak of Mr. Monckton's opportunities to know whereof he writes. He has been known to the profession for thirty or more years, and has issued sundry valuable treatises on this subject.

Mosaics.

MR. FRANK L. LINDEN has just returned from New York, where he has been decorating apartments on Fifth avenue for G. M. Pullman, Esq. He also assisted in the selection of all furnishing.

MR. THEODORE ALTENEDER, 355 North Tenth street, Philadelphia, manufacturer of improved drawing instruments bearing his name, has just issued a revised and enlarged catalogue, which will be sent free to any address, upon application.

HANDSOME trade circulars are not uncommon, but a neat and concise exposition of the virtue of magnesia coverings, just issued by Alfred C. Kemper, of Chicago, is sure to attract attention, and, because of its plain talk in regard to the uses and virtues of a proper pipe covering, will be found valuable.

THE Fifth Avenue Viaduct and Express Offices of the Chicago & Great Western Railway are now nearly completed. The stone used is New Brunswick brownstone, and was furnished by J. S. F. & J. P. Batchen. The same firm also supplied the rough brownstone for the Union Depot at Indianapolis, and are now furnishing the Brunswick brownstone for the depot of the Canadian Pacific Company, at Montreal, P. Q.

THE attention of architects and builders is called to the illustration of the Norris pulley in this issue. It has attained an extended notoriety on account of its excellence, having been placed in a large number of the finer and better class of buildings constructed during the past four years, including many public buildings. The manufacturers started by placing twenty-four qualities of the Norris pulley on the market. At the present time they make over sixteen hundred different qualities, five hundred of them manufactured for the use of chain, which is now largely used for

raising and lowering sashes. The company claims to make the largest assortment of pulleys in the world. Nearly all the mills of the country have the Norris mortice for morticing the holes for this pulley. The company will cheerfully send samples of any of the pulleys to any architect in any part of the country who will write for the same.

UNDER the title "How Best to Light our Country Homes and Resorts," the Gilbert & Barker Manufacturing Company recite, in a beautifully illustrated pamphlet, the quality and excellencies of the Springfield Gas Machine, constructed for the manufacture of gas from gasoline, and as well how it is possible, cheaply, to have even a single tenement lighted with the same equal to the best coal gas, although it may be miles distant from a city or a natural gas field. The company is represented in New York, Boston, Chicago, Philadelphia, San Francisco and Springfield, Mass.

THE Goulds Manufacturing Company, of Seneca Falls, N. Y., has just issued a catalogue and price list for 1888 and 1889 that is to be commended for its completeness and style. It embraces 288 illuminated and illustrated pages, showing the full line of the factory product, including, besides plumbers' cast-iron supplies, pumps, engines, runs and other hydraulic machinery, operated either by manual, animal, wind, water, steam or electricity. It contains, besides detailed descriptions of various apparatuses, much other valuable information. Copies may be had by addressing the firm, No. 60 Barclay street, New York City.

THE Seyssel and Neuchatel rock asphalt is being extensively used in Chicago, in the construction of brewery, stable and cellar floors. The Smith Brewing Company, Conrad Seipp Brewing Company, Shoenhofen Brewing Company, Wacker & Birk Brewing and Malting Company, McAvoy Brewing Company, Bartholomae Brewing Company, and other prominent brewing and malting companies have utilized it in the construction of floors to their washhouses, racking, storage, cooler, fermenting rooms, etc., and many of the leading architects have itemized it in their specifications of material for stables, carriage houses and cellar floors.

REFERENCE has previously been made to the "McClellan" anti-siphon trap vent. An exhibition of its construction and practical working has recently been given at the Grand Pacific Hotel, Chicago, under the auspices of the manufacturers, the Du Bois Manufacturing Co., of New York City. This device is to do away with long lines of back-air piping, thus simplifying the drainage system, and furnishing a vent that works with absolute certainty, and one which is readily accessible because always in plain view. Its peculiarity consists chiefly in a mercurial seal which is not disturbed under any circumstances, and which permits a free flow of air into the waste-pipes on the sewer side of the trap, thus effectually shutting out sewer gas. It is easily applied to new or old work, and never freezes.

CHICAGO architects, contractors and gasfitters have been notified by the People's Gas Light and Coke Co. that from and after November 1, 1888, all gasfitting in new buildings, on the line of the company's mains, must be done in strict conformity with the regulations of the company, in order that a safe and satisfactory supply of gas may be insured to consumers. No meter will be set in any building fitted for gas, after November 1, which shall not have been inspected by the company's inspector, or in which, upon inspection, the fitting shall be found defective, or not in strict accordance with the inclosed regulations. Due notice in writing must be sent to the company's office before any pipes are concealed by flooring or plastering, and upon receipt of such notice inspection will be made without delay and without charge.

AMONG the several systems for heating buildings, each have their advocates. Some adhere to the hot air plan; some give the preference to steam heating, and others again are decided in their advocacy of heating by hot water. It seems, while both heated air and steam have proved effective, that heating by the hot-water process is forging ahead in many localities, on account not only of the steady output of heat, but, as it is claimed, on the score of simplicity of the appliance, its durability and reliability, perfect safety and healthfulness, and marked economy in running the appliance. Of the heaters of this class, the "Bolton Hot Water Heater," manufactured by the Detroit Heating and Lighting Co., stands in the front rank, and full particulars of its merits may be gathered by the interested, by a brief and to the point circular just issued by the company.

MR. I. P. FRINK, of 551 Pearl street, New York, whose reflectors and reflecting chandeliers are so generally introduced in public buildings, reports many orders on hand; among prominent contracts for lighting, he has under way the Tompkins Avenue Congregational Church, Brooklyn, N. Y.; Summer Avenue Congregational Church, Brooklyn, N. Y.; First Presbyterian Church, Galveston, Tex.; Asbury Memorial M. E. Church, Providence, R. I.; Cumberland Presbyterian Church, Murfreesboro, Tenn.; Reformed Church, Athens, N. Y.; Opera House, Carbondale, Pa.; Los Angeles Theatre, Los Angeles, Cal.; the Art Galleries of Boussod, Valadon & Co., 303 Fifth avenue, New York; Galerie des Beaux Arts, 174 Fifth avenue, New York; G. W. Lininger, Omaha, Neb.; The American Art Galleries, New York; for the Verestchagin Exhibition, and several orders from foreign countries.

AMONG the new advertisements that appear in this number will be found a very interesting one to master mechanics, contractors and employers of working men generally, namely, "The Employers' Liability Assurance Corporation," an organization instituted to protect this class against pecuniary liability to their help in case of accidents. It has come to be a pretty well-known fact, that the courts have decided masters are liable for personal injury to workmen in their employ, resulting from defective material, defective construction, negligence on the part of other employes, or other like causes, and this makes the being an employer of other men a serious matter. This corporation proposes to afford relief by taking from the shoulders of employers all trouble and responsibility for a certain percentage of each \$100 of the wages paid, agreeing to settle therefor with injured, and where cases are carried into

the courts to follow them there, meeting all the costs and expense, and where damages are awarded to pay them without further charge to the holders of its policies. The corporation has a paid-up capital of \$500,000, and has been in existence eight years, during which time 13,000 policies, covering 500,000 workmen, have been issued, and 10,000 accident claims settled.

J. BARDSEY, No. 59 Elm street, New York, has issued a neat price list, presenting his well-known patent wood door-knobs, drawer-pulls, door-stops, check-spring hinges, escutcheons, etc. These goods are too well known to require any special reference to them, their excellence being fully understood by builders all over the country generally. If there are any who have not yet considered them and made them a part of their specifications, they would do well to send for this price list, as these goods are being put in the better class of buildings everywhere.

THE contracts upon the addition to the New York Museum of Natural History were opened October 4. Four bids were opened by the Park Commissioners. The contract for the foundation of the building has already been let and the work is nearly completed. The designs for the structure were made by Cady & Co., the architects selected by the Museum trustees, and the drawings and specifications were unusually specific and stringent. It was estimated that the cost of the work which is to form the completed front of the Museum would be about \$350,000. Each of the bidders was required to deposit a check for \$3,500 with his bid, as five per cent of the \$70,000 bond required in case his bid was accepted. The figures were given on the cost of the general structure, and then on the price per cubic foot on 57,000 cubic feet of concrete and rubble masonry. The several bids were as follows:

Bidder.	Structure.	Rubble.	Total.
James B. Smith.....	\$329,500.....	23 cents cubic foot.....	\$342,610
Edward Frank.....	344,730.....	05 cents cubic foot.....	347,580
Richard Deeves.....	331,500.....	25 cents cubic foot.....	345,750
W. & T. Lamb, Jr.....	353,085.....	28 cents cubic foot.....	369,045

The contract was awarded to James B. Smith and his bid will be referred to the controller to pass on the securities, when the work, Mr. Smith said, would begin at once, as he was anxious to get forward with it as much as possible before cold weather set in. President Robb, of the Park Board, who is also a trustee of the Museum, said that he was well satisfied with the bid of Mr. Smith, which placed the cost at a reasonable figure and the contractor being known as a trustworthy and responsible man. Mr. Cady, the architect, will also superintend and inspect the progress of the work. The contract calls for the completion of the building in three hundred days.

Railroad Notes.

ARCHITECTS on the line of the Wisconsin Central R'y from St. Paul to Chicago who attend the convention will receive a certificate with their ticket to Chicago which, when signed by the Secretary of the Western Association of Architects, will entitle them to a one-third return rate. The service on this road is superb.

A NEW Pullman palace sleeping car line between Chicago and Philadelphia has been established, via Chicago & Grand Trunk and Lehigh Valley railroads. Limited express leaves Chicago at 3:25 P.M. daily, with one of the most modern Pullman palace sleeping cars, to run through to Philadelphia via Niagara Falls and the Lehigh Valley route, arriving at Philadelphia at 7 A.M. daily on the second morning. Returning, west-bound, the car leaves Philadelphia daily at 8 P.M., arriving in Chicago on the Pacific express at 8:10 A.M. on the second morning. What makes this route particularly popular is that on the east-bound journey a stop-over at Niagara Falls of seven hours is allowed, and on the west-bound journey a stop-over of four hours, giving passengers ample time to visit the Falls. However, passengers not desiring to lay over at the Falls on the east-bound journey may change at Niagara Falls, taking a Pullman parlor and buffet car, leaving the Falls at 8:30 A.M., arriving in Philadelphia at 10:49 P.M.

THE CHICAGO AND DENVER EXPRESS.—Commencing Sunday, October 28, the only exclusive through Pullman Car Line from Chicago to Denver, via Council Bluffs and Omaha, will be established over the Chicago, Milwaukee & St. Paul and Union Pacific railways, on the following time schedule:

Leave Chicago daily.....	10:40 P.M.
Arrive Council Bluffs.....	6:50 P.M.
Arrive Omaha.....	7:05 P.M.
Leave Omaha.....	8:00 P.M.
Arrive Denver (second day).....	5:25 P.M.

This train makes direct connection with all trains from the east, arriving in Chicago at night. Sleeping Car fare, \$6.00. Excursion Tickets to all Colorado points now on sale. For tickets and sleeping-car reservations apply at City Ticket Offices, 63 Clark street, Grand Pacific Hotel; Palmer House and Union Passenger Station, Canal and Adams streets; or address F. A. Miller, Ass't Gen'l Passenger Agent, 63 Clark St., Chicago, Ill.

MEMBERS of the Western Association of Architects who contemplate attending the convention at Chicago, November 21, 22 and 23, will be glad to know that solid vestibuled trains now run over the Michigan Central, "the Niagara Falls Route," between Chicago and Buffalo. These trains are not only equipped with the finest Wagner palace sleeping cars, but are made thoroughly complete by having vestibuled dining, smoking, first-class and baggage cars, and although constituting the famous "limited" of the Michigan Central, carry all classes of passengers without extra charge. These trains carry through vestibuled sleeping cars between Chicago and New York, via New York Central & Hudson River Railroad, and between Chicago and Boston via New York Central and Boston & Albany Railroads. The east-bound "limited" also carries a through sleeper, Chicago to Toronto (via Canadian Pacific), where connection is made with parlor car for Montreal. Accommodations secured at the Michigan Central ticket offices, No. 67 Clark street, corner Randolph, and depot, foot of Lake street, Chicago.

Synopsis of Building News.

Abbottsford, Wis.—The Wisconsin Central Railroad Company are to build a \$60,000 depot and hotel building.

Athens, Tenn.—Architect T. C. Veale has plans for a brick and stone church building; cost \$10,000; also three-story brick and stone music hall for Grant Memorial University; cost \$10,000; and other buildings to cost \$12,000.

Aurora, Ill.—Architect J. C. Minot has plans for a brick office and store building, 180 by 100 feet; cost \$50,000. For St. Nicholas Church, brick and stone parsonage; cost about \$10,000.

Buffalo, N. Y.—Architect W. W. Carlin; For Geo. Herlan, frame residence; cost not estimated. For A. A. Thomas, frame residence; cost not estimated.

Architect C. L. W. Eiditz, of New York, has prepared plans for a block of brick stores, to be built for J. M. Richmond.

Architect E. A. Kent: For Sidway estate, brick store building.

Chattanooga, Tenn.—Architect Breeding has planned for McCallace & Dietzen two four-story brick stores; to cost \$25,000.

Architect J. R. Ryan has prepared plans for ten two-story brick stores, to be erected for P. H. Lynch, at a cost of \$9,000.

Chicago, Ill.—Architects Burling & Whitehouse: For Wm. Goldie & Son, seven three-story and basement stone front residences, 20 by 65 feet; cost \$60,000.

Architects J. M. Van Osdel & Co.: For Amos Grannis, six-story brick and stone warehouse, 42 by 148 feet; cost \$40,000.

Architects Thiel & Lang: For A. Stoehr, three-story brick and stone store and flats, 22 by 80 feet; cost \$10,500. For H. Auber, two-story brick and stone dwelling, 24 by 50 feet; cost \$8,700. For E. Johnson, four-story store and flats, 24 by 80 feet; cost \$10,000. For A. Kosecki, three-story brick store and flats, 24 by 95 feet; cost \$7,500.

Architects J. F. & J. P. Doerr: For Robert Hunter, three-story brick and stone store and flats, 25 by 95 feet; cost \$10,000.

Architect Louis Martens: For Henry Towne, three-story factory building, 100 by 100 feet; cost about \$25,000. For J. Meier, three-story store and flat building, 68 by 75 feet; cost about \$20,000. For A. Weber, three-story brick flat building, 24 by 61 feet; cost \$7,000.

Architect M. E. Bell: For Judge Gwynn Garnett, three-story stone front residence, 23 by 78 feet; cost about \$10,000.

Architect Thomas Hawkes: For A. S. Newberry, six-story brick, stone and terracotta apartment building, 100 by 97 feet; cost \$150,000; also, five-story brick and stone warehouse, 40 by 107 feet; cost \$25,000.

Architect W. G. Barfield: For School Board of Lake View, three-story pressed brick and terra-cotta school building, 90 by 110 feet; cost about \$30,000.

Architects Ostling Bros.: For F. H. O'Connor, three-story brick and stone flat building, 24 by 72 feet; cost \$18,000.

Architects Schaub & Berlin: For T. L. Forrest, three two-story residences, 58 by 65 feet; cost \$15,000.

Architect William Ohlhaber: For Fritz Munk, three-story brick store and flats, 25 by 72 feet; cost \$10,000. For A. Mueller, three-story brick store and flat building, 23 by 70 feet; cost \$6,000.

Architect C. M. Palmer: For Potter Palmer, block of five three-story stone front residences, 150 by 72 feet; cost about \$60,000.

Architect L. G. Hallberg: For Levi W. Gagg, three-story brick and stone residence, 60 by 60 feet, at Lake Forest, Ill.; cost about \$20,000. For Mrs. Margaret A. Estey, four-story flat building, 25 by 64 feet; cost \$10,000. Also has plans for a \$50,000 store and flat building and remodeling a \$30,000 factory building in hand.

Architects Wilson, Marble & Lamson: For Wm. H. Thomas, four-story and basement brick and stone apartment building, 75 by 83 feet, on University place; cost \$50,000. For same, eight four-story and basement brick and stone flat buildings, 18 by 60 feet, on Lake avenue; cost \$50,000. For J. Schuering, three-story and basement stone front residence, 22 by 60 feet, on Lake avenue, near Thirty-fourth street; cost \$9,000.

For H. R. Wilson, seven three-story and basement stone front residences, 21 by 70 feet, on South Park avenue, near Thirty-fourth street; cost \$10,500 each. For S. M. Fisher, two-story barn; cost \$2,500. For A. W. Rainbow, two-story and basement brick and stone flats, 25 by 60 feet, on Monroe street, near Western avenue; cost \$8,500. For spring work, four stone front residences on West Jackson street; cost about \$16,000 each. Also two three-story and basement stone front residences, 25 by 72 feet, on Michigan avenue, near Twenty-fifth street; cost \$15,000 each.

Architect O. J. Pierce: For J. H. Jones and J. R. Le Vally, two two-story and sub-cellar brick and stone residences, 48 by 63 feet, on Ellis avenue near Forty-fourth street; cost about \$13,000; under way. For James K. McGill, two-story, sub-cellar and attic brick and stone residence, 29 by 62 feet, corner of Adams street and Hamilton avenue; slate gables, stained glass, hardwood finish, etc.; cost \$10,000.

Architects Edbrooke & Burnham: For H. P. Hatch, three-story and basement stone front flat building, 20 by 75 feet, at 405 Ontario street; cost \$8,500. For David Wesson, two-story frame residence, on Sheridan avenue near Sixty-first street; cost \$4,500.

Architect H. S. Jaffray: For J. B. Allen, five-story and basement brick, stone and terra-cotta apartment building at 343-344 Michigan avenue; the building will have marble vestibule, steam heating, elevator, copper bays, etc.; cost \$35,000. For H. Homer & Co., brick warehouse, 78-82 West Randolph street; cost about \$25,000.

Architect F. L. Lively: For A. L. & F. D. Patterson, three-story and basement rock-faced buff Bedford stone front store and flat building, 50 by 60 feet, on Cottage Grove avenue near Forty-third street; copper bays, mantels, etc.; cost \$15,000.

Architects Cole & Dahlgren: For Frederick List, three-story and basement stores and flats, 50 by 72 feet, Wentworth avenue and Sixty-eighth street; Indiana pressed brick and stone trimmings; cost \$12,000. For C. H. Root, five two-story basement and attic houses, 100 by 50 feet, corner Fifty-second street and Hibbard avenue; front of neat variety of pressed brick and stone, with ornamental porches and bays; planned with stairways and halls, and all modern conveniences; hardwood floors and finish; electric work and furnaces; cost \$17,000. For Henry H. Belfield, double house, 46 by 65 feet, on Washington avenue, between Fifty-seventh and Seventy-eighth streets; Indiana pressed brick and stone, oak and Georgia pine floors and finish; steam and furnaces; cost \$10,000. For Harland Law, residence, 26 by 44 feet, on corner of Humboldt boulevard and Wabansia avenue; basement of concrete; frame construction; finished in hardwood and Georgia pine; furnace and electric work; cost \$4,000. For Mrs. Goodfellow, residence, corner of Cosgrove and Commercial avenues; brick and frame; all modern conveniences; cost \$4,000. For T. A. Gillett, residence, 32 by 40 feet; Lake View; brick and frame; hardwood finish; cost \$4,000.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall.

The dearth in architectural news amounts almost to a famine, but it is in a measure accounted for by the season, the contractors not having cleaned up, nor the architects secured much work ahead.

The Chamber of Commerce will be dedicated, in all probability, on January 1, 1889, and the building will be a monument of grace and beauty for the next hundred years, at which time architecture, I hope, will have reached and perched upon the pinnacle of perfection.

Architects Samuel Hannaford & Sons report for Krippendorf & Dittman the plans for the rebuilding of their seven-story shoe building, lately destroyed by fire. It will be built of brick, slow burning construction, tin roof with all modern improvements. Residence for A. M. Detmer, pressed brick; with twelve rooms, slate roof, hardwood finish, etc. Warehouse, 100 by 125 feet, for Geo. S. Stearnes, five stories, pressed brick, tin roof, etc. Addition to the stone residence of Alex. McDonald. This residence is one of the finest suburban mansions in this vicinity, and the improvements will fully correspond. There will be a music room, additional chambers, etc. This firm is quite busy on sketches, but are not ready for reporting.

Architect A. J. Bast has drawn plans for a three-story store and flat building for Peter Heuber of Bellevue, Ky., to be built of brick, stone trimmings, have Eastlake finish, ten rooms, with all the modern improvements, galvanized iron cornice and tin roof; cost \$3,000. Plans also for a two-and-one-half-story dwelling for Robert Eichelman, to be built of frame with grained pine finish, eight rooms, bath-rooms and water-closets, galvanized iron cornice and tin roof; cost \$3,000. Plans also prepared for a two-story store and flat building at Bellevue, Ky., for John Meyer of that city; will be built of brick and stone, have Eastlake finish, iron store front, bath-rooms and water-closets, galvanized iron cornice, slate and tin roof, and contain modern improvements and conveniences; it will cost about \$6,000. This is quite an ornamental residence.

Architect W. W. Franklin has prepared plans for a two-story stable for Charles H. Dumhoff; will be built of brick with stone trimmings, have metal roof stalls, and contain modern improvements; it will cost about \$3,000. Other plans on the board.

Architect Lucien F. Plympton: For T. Johannigman, a two-story half timber and shingle residence, containing nine rooms, shingle roof; cost \$3,500. For the Woodburn

Heights Syndicate, a two-and-a-half-story frame house of ten rooms, Norwegian style, with slate roof; cost \$5,000.

Architect S. E. DesJardins: A brick patrol station, two stories and a basement, tin roof; cost \$3,300. For H. H. Finch, a double brick house of nine rooms each, pine finish, slate roof; cost \$8,000. For Wm. Kassenberger, Memphis, Tenn., a frame residence of two stories and ten rooms, pine finish and shingle roof; cost \$7,000.

Cragin, Ill.—Architects Bauman & Lotz, of Chicago: For Otto G. Gartenberg, elevator, to cost \$11,000.

Denver, Col.—Architects F. E. Edbrooke & Co. have plans for the new Masonic Temple, 100 by 125 feet; cost \$225,000.

The Chicago Lumber Company are about to erect \$50,000 worth of buildings. Mr. Boettcher is about to erect a \$30,000 business building.

Among the permits recently issued are the following for buildings to cost \$4,000 or more: Anson Bearson, two-story brick terrace, 51 by 58 feet; cost \$4,000. A. S. Ripley & Son, four-story and basement brick building, 76 by 116 feet; cost \$30,000. F. Morrell, two-story brick dwelling, 32 by 48 feet; cost \$6,000. S. Hayes, five brick dwellings, 22 by 45 feet; cost \$12,500. Mrs. Annie Flaherty, two-story brick dwelling, 24 by 55 feet; cost \$5,000. G. W. Huntington, one and one-half story brick barn, 18 by 18 feet; cost \$5,000. John Monat Lumber Co., two-story brick stable, 30 by 105 feet; cost \$5,000. Mrs. Davidson, two-story brick dwelling, 50 by 60 feet; cost \$5,500. F. C. Eberly, two-story brick dwelling, 28 by 70 feet; cost \$3,000. Leonard Walters, two-story brick dwelling, 28 by 70 feet; cost \$7,000. Fred S. High, two-story brick dwelling, 25 by 50 feet; cost \$4,000. H. W. Newell, four two-story brick dwellings, 35 by 85 feet; cost \$10,000. W. W. Brasie, two-story brick terrace, 52 by 125 feet; cost \$24,000. Philip Kohn, three one-story brick double dwellings, 40 by 40 feet; cost \$8,000. N. H. Nelson, two-story brick terrace, 44 by 40 feet; cost \$4,000. J. N. Best, three-story brick building, 25 by 75 feet; cost \$10,000. Henry Stewart, two-story brick building, 32 by 60 feet; cost \$6,000. Frank Jerome, twelve one-story brick dwellings and five one-story frame dwellings, 21 by 28 feet; cost \$7,500. G. D. McClain, two-story brick dwelling, 25 by 44 feet; cost \$4,500. John Gray, two-story brick terrace, 38 by 39 feet; cost \$4,000. W. W. Knight, two-story and basement brick and stone dwelling, 41 by 62 feet; cost \$14,000. A. Kopper, two-story brick building, 50 by 75 feet; cost \$10,000. J. J. Huddart, four one and one-half story brick dwellings, 22 by 45 feet; cost \$10,400. Same, five one and one-half story brick dwellings, 22 by 45 feet; cost \$13,000. Colorado Automatic Refrigerator Company, three-story and basement brick building; cost \$17,500. Lonergan Meat Co., one-story and basement brick building, 32 by 100 feet; cost \$5,600. M. L. Bell and W. Stevens, six one-story frame dwellings, 24 by 40 feet; cost \$6,000. J. A. Gensen, two-story brick double dwelling, 32 by 50 feet; cost \$7,000. Russell & Means, four one-and-one-half-story brick dwellings, 29 by 48 feet; cost \$16,000. F. W. Gromme, two-story brick building, 50 by 66 feet; cost \$8,000. J. L. Budge, two-story brick dwelling, 30 by 45 feet; cost \$4,500. G. W. Huntington, two-story brick dwelling, 30 by 50 feet; cost \$5,000. D. C. Benedict, two one-story brick dwellings, 22 by 50 feet; cost \$4,000. T. W. Lawrence, two-story and basement brick dwelling, 31 by 41 feet; cost \$5,500. Edward O'Connor, two-story brick double dwelling, 44 by 74 feet; cost \$9,000. Artesian Ice Company, two-story stone and frame building, 86 by 104 feet; cost \$15,000. D. C. Benedict, two brick dwellings, 22 by 45 feet; cost \$5,500. A. S. Miller, two-story brick double dwelling, 50 by 125 feet; cost \$12,000. Bush & Morse, three-story brick building, 50 by 125 feet; cost \$25,000. Mrs. M. G. James, two-story brick building, 25 by 100 feet; cost \$7,000.

Detroit, Mich.—Brick has taken a drop and there are hopes of some activity soon. Labor remains unchanged. Two hundred and twenty-six permits for new buildings were taken out during the month of September, and fifty-one for alterations.

Architects Van Leyen & Preston: For C. P. Black, two-story dwelling, 40 by 60 feet; brick with stone trimmings, slate roof; cost \$5,000. Theater interior for Wonderland Museum, 60 by 75 feet; cost \$10,000. For E. F. Lund, two-story dwelling, 40 by 50 feet, frame, shingle roof; cost \$5,000. For George A. Lund, two-story dwelling, 40 by 50 feet, frame and stone, shingle roof; cost \$5,000.

Architects Donaldson & Meier: For J. H. Toepel, two two-story dwellings, 40 by 65 feet; brick, stone and stone trimmings; gravel roof; cost \$5,200. For same party, double two-story dwelling, 44 by 57 feet; brick with stone trimmings; slate roof; cost \$8,000. For Dr. Clawson, three-story office building, 25 by 45 feet; brick, with stone trimmings; gravel roof; cost \$4,500. For same party, two-story dwelling, 20 by 60 feet; brick, with stone trimmings; cost \$4,000.

Architects Scott & Co.: For Detroit Omnibus Co., three-story barn, 70 by 120 feet; brick, with stone trimmings; gravel roof; cost \$15,300. For same party, two-story barn, 60 by 260 feet; brick, with stone trimmings; gravel roof; cost \$30,000. For Roehm & Goodell, two two-story dwellings, 38 by 62 feet each; brick, with stone trimmings; slate roof; cost \$30,000.

Architect A. C. Varney: For Morton, Hickey & Phelps, seven three-story stores; 125 by 70 feet, brick with stone trimmings, gravel roof; cost \$28,000. For Charles Hismirck, two-story dwelling, 54 by 46 feet, brick with stone trimmings, slate roof, cost \$7,500. For A. S. Sherwood, two-story double dwelling, 33 by 60 feet each, brick, stone trimmings; cost \$5,000.

Architects Mason & Rice: For John A. Avery, two-story double dwelling, 58 by 70 feet, brick with stone trimmings, slate roof; cost \$15,000.

Architects Hess & Rossemann: For A. A. Atterberg, two-story dwelling, 27 by 70 feet, brick with stone trimmings, slate roof; cost \$8,000.

Englewood, Ill.—Architect Jul De Horvath: For Geo. Young, frame residence, 25 by 45 feet; cost \$2,500. For Anna Chiff, three-story store and flat building, 25 by 80 feet, Tiffany brick front, terra cotta ornaments, galvanized bay and cornice; cost \$8,000. Town of Lake police station and engine house, 75 by 100 feet, Bedford stone and Anderson pressed brick; cost \$2,500; projected. G. W. Allen, Auburn, New York, three-story flat building on Prairie avenue near Thirty-first street, 25 by 60 feet, buff Bedford stone front; cost \$12,000; projected. Same party, two-story flat building, Forest avenue near Thirty-seventh street, 25 by 62 feet, Anderson pressed brick and terra-cotta front; \$8,000; projected.

Freeport, Ill.—The cornerstone of the new building for the Young Men's Christian Association was laid October 19 with appropriate ceremonies. The structure is to cost \$20,000.

Jackson, Mich.—Architect L. D. Grosvenor: For Board of Education, three-story brick and stone school building, 45 by 100 feet; cost \$10,000.

Joliet, Ill.—Architects Ackerman & Sunderland, of Chicago, have plans for a two-story and attic residence, to be erected for B. F. Fuller; cost \$10,000.

Kansas City, Mo.—Architect L. L. Levering: For St. Vincent Society, brick and stone church building, 40 by 85 feet.

Architects Schrage & Nichols: For Joel Halford, six two-story frame cottages, 24 by 32 feet; cost \$10,800.

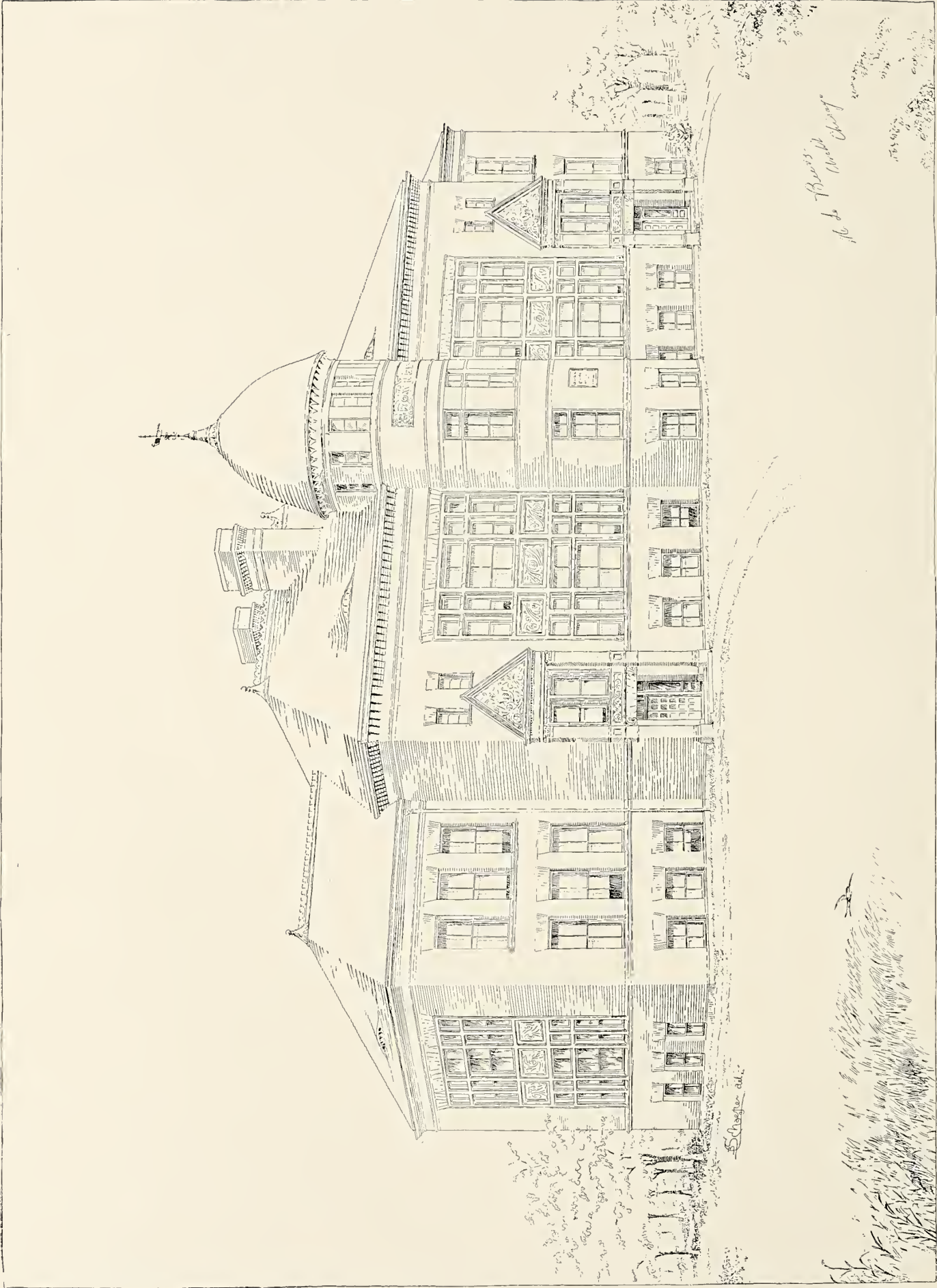
Architect S. E. Chamberlain: For J. H. Cheek, block of six three-story brick and stone residences; cost \$35,000.

Among the permits recently issued are the following, to cost \$5,000 or more: J. Halford, six frame dwellings; cost \$10,800. J. H. Cheek, six three-story brick dwellings, 150 by 57 feet; cost \$35,000. Mrs. M. L. Simpson, three-story brick dwelling; cost \$5,000. Kansas City Real Estate Exchange, office building; cost \$15,000. Mrs. M. L. Simpson, two three-story brick dwellings, 40 by 48 feet; cost \$11,000. Same, three-story brick double residence, 41 by 49 feet; cost \$7,000. W. H. Jones, two-story brick dwelling, 25 by 50 feet; cost \$6,000. Mayfield & Tomb, two-story brick business building, 24 by 118 feet; cost \$7,000. Dr. J. D. McMillen, block of two-story brick business buildings, 81 by 45 feet; cost \$6,000. Ellis Harris, two two-story brick residences, 22 by 55 feet; cost \$6,500 each. Henry Barnes, addition to residence; cost \$5,000. Allen Moynihan, three-story brick residence; cost \$12,000. Geo. Roberts, two-story brick residence, 43 by 44 feet; cost \$5,000. H. C. Murdock, brick residence and business house, 50 by 60 feet; cost \$12,000. W. H. Dickinson, brick residence, 23 by 45 feet; cost \$6,000. R. S. Vivian, four three-story brick residences, 38 by 46 feet; cost \$14,000 each. R. S. Vivian, two three-story brick dwellings, 20 by 46 feet each; cost \$14,000. C. F. Quest, brick business block, 40 by 108 feet; cost \$9,000. L. R. Carpenter, eight two-story brick dwellings, 20 by 40 feet each; cost \$128,000.

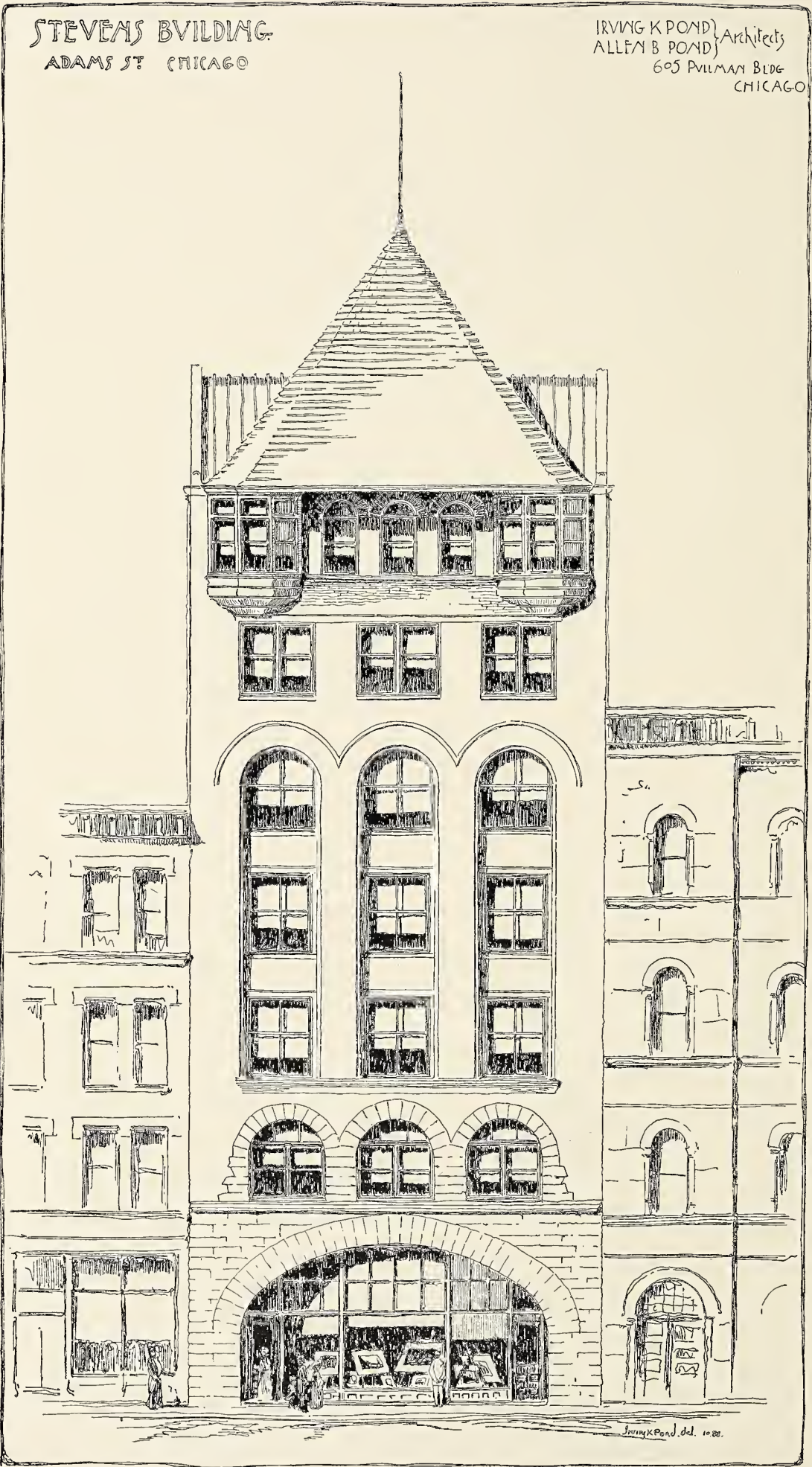
Kenosha, Wis.—Architect H. D. Deam, of Chicago, has prepared plans for a two-story brick factory building for the Scottford Manufacturing Co.; cost \$13,000.

Lausling, Mich.—Architects E. E. Meyers & Son have prepared plans for a brick and stone church building, to be erected by the Central M. E. Society at a cost of \$30,000.

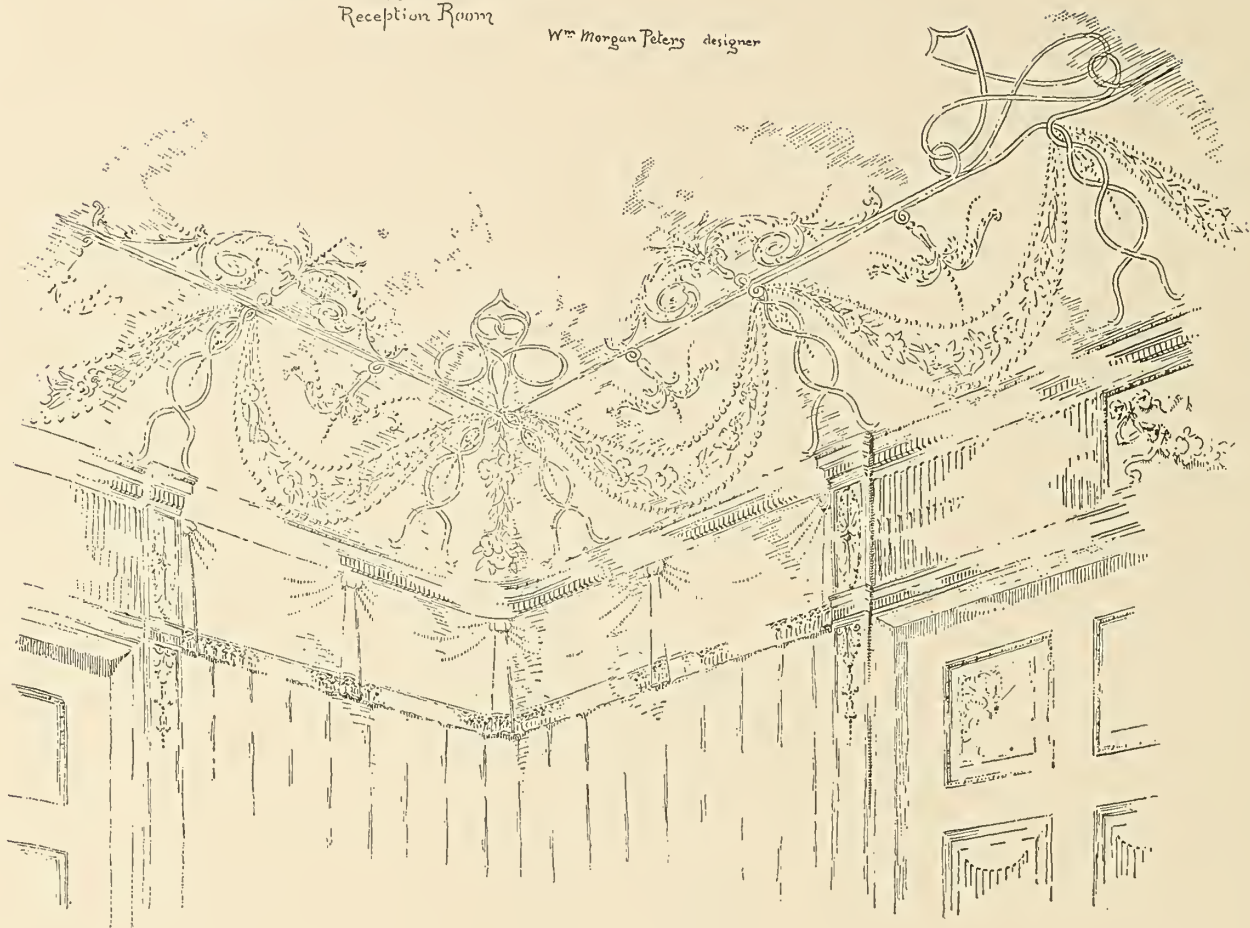
Michigan City, Ind.—Architects Burling & Whitehouse, of Chicago: For the Episcopal Society, church building, to be built of variegated brownstone, nave 35



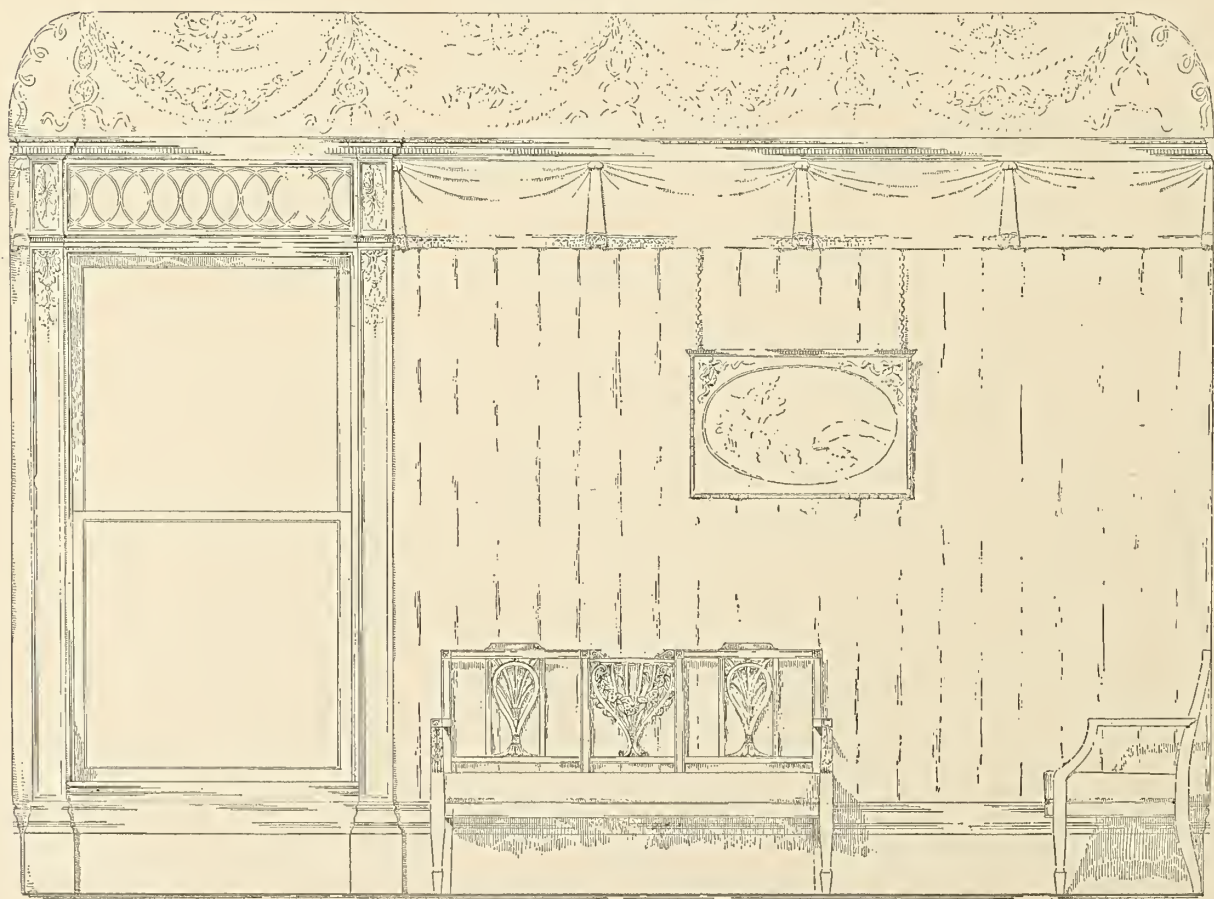
BROWNELL SCHOOL, ENGLEWOOD, ILL.
M. L. BEERS, ARCHITECT, CHICAGO.



Perspective View looking up into corner
in
Reception Room
W^m Morgan Peters designer

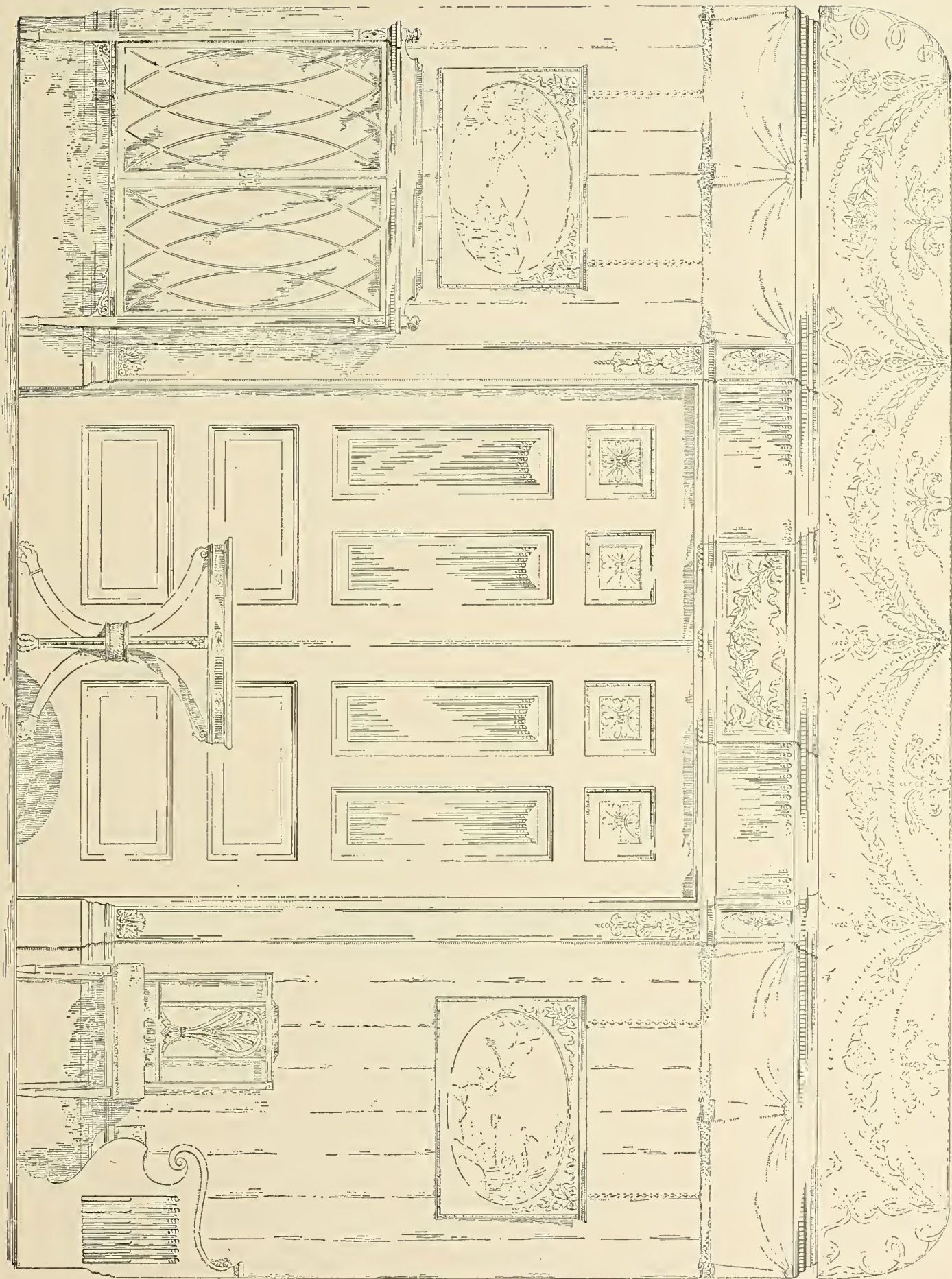


North Elevation of Reception Room



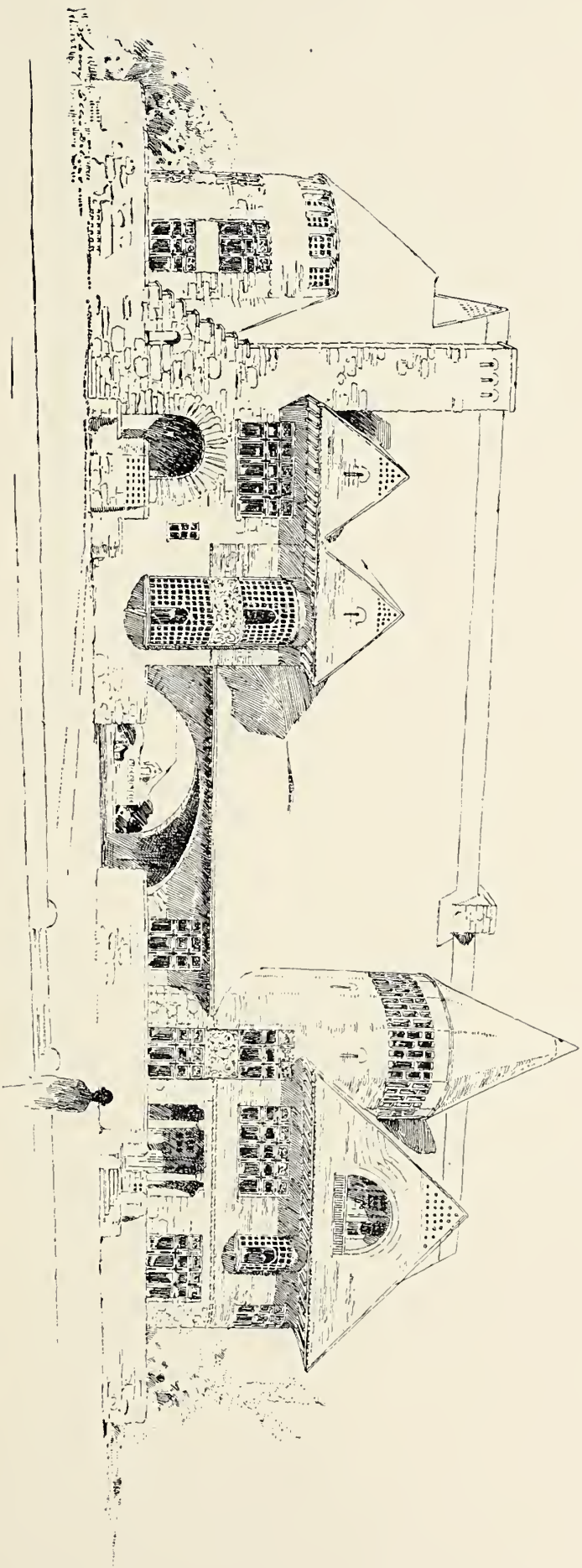
W^m Morgan Peters designer Chicago.

South Elevation of Reception Room



Wm Morgan Peters, designer Chicago

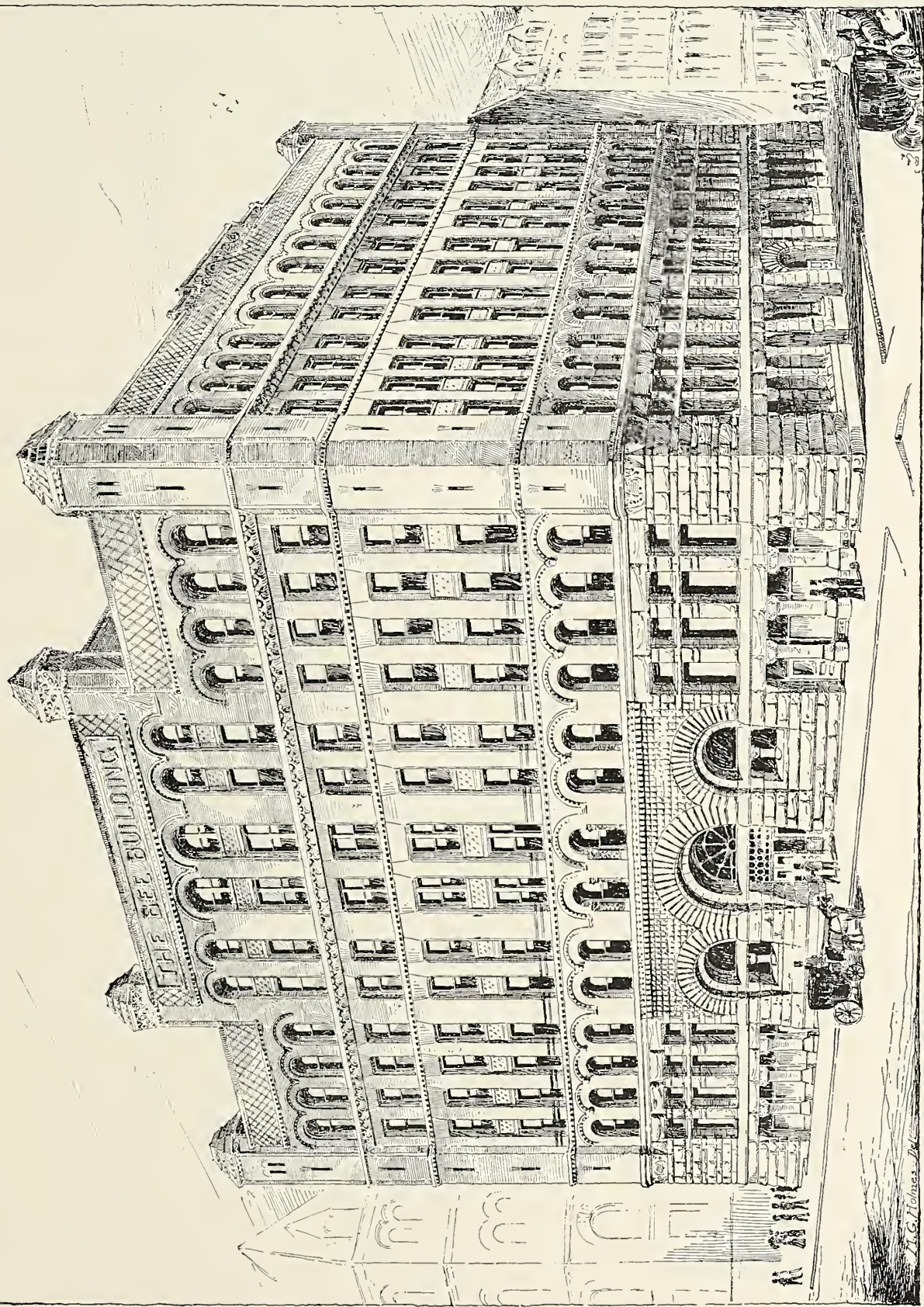
For description, see article, "Interior Decoration," this number.



CONNECTED RESIDENCES FOR JOHN NORTON AND J. B. BARTHOLOMEW, TOPEKA, KAN.

L. S. BUFFINGTON, ARCHITECT, MINNEAPOLIS, MINN.

L. S. BUFFINGTON-ARCHITECT
MINNEAPOLIS-MINN. D. 1888



: THE "BEE" BUILDING · OMAHA NEB · S.J. DEMAN ARCHT · CHICAGO



Entered at the Postoffice at Chicago as second-class matter.

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DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

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CHICAGO, ILL.

WESTERN ASSOCIATION OF ARCHITECTS.

OFFICERS FOR 1889.

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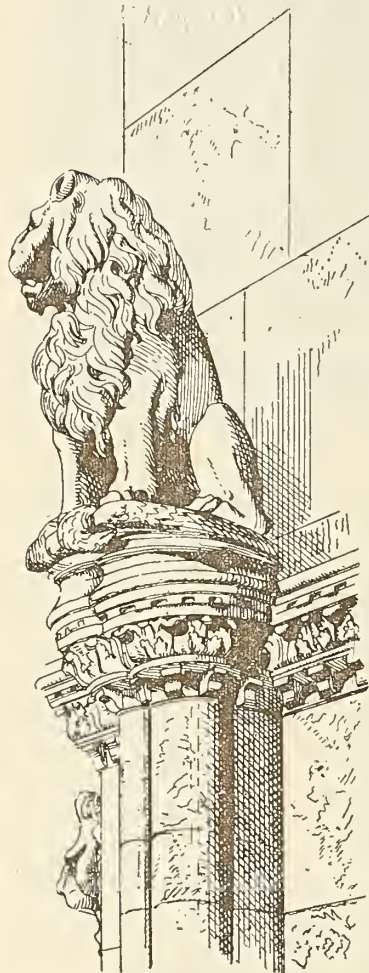
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THE convention of the Western Association of Architects, which has just closed, was characterized by the same unanimity and harmony of spirits, and practical good sense, and breadth and liberality of policy, which have made the conventions of this association so remarkable in the history of professional organizations, and so precious and dear to the members of the association. The attendance was remarkably large when one considers that the notices of time and place of convention did not reach the members until about a week or ten days before the time fixed for the convention. Its debates and final action upon the project of consolidation of architectural associations, as well as the discussion of the various projects of statutory revision, reform in the management of the architectural service of the United States Government, the statistics of competitions, the collection of legal decisions affecting building interests, the formation of a protective league, and of other subjects brought to the notice of the convention by the reports of committees and suggestions of members, were characterized by an unusual degree of intelligence. What is particularly agreeable to note is the fact that it was evident that the convention was a law unto itself; that it was not to be led by any one person or by any committee or board of officers; that it reproduced in its best sense the methods of thought and action which for so many years were characteristic of the New England town meeting, and which it is hoped will produce results as fruitful and beneficent as those achieved by its prototype.

WILLIAM WORTH CARLIN, of Buffalo, New York, who was elected president of the Western Association of Architects at the recent convention, was born at Chautauqua, New York, September 25, 1850. Though a young man Mr. Carlin has been honored by his association because of his standing in his profession, and his popularity with those members of the association who have noted his earnestness in association work, and his executive ability displayed in everything he has been called upon to perform. Sidney Smith, of Omaha, the chairman of the board of directors, has held office ever since the commencement of the organization, and his devotion to association interests reaches as far back as the first letter written to THE INLAND ARCHITECT suggesting such a society, which was received from him. Secretary Normand S. Patton, and Treasurer Samuel A. Treat were continued in their respective offices by unanimous vote of the association. L. S. Buffington, of Minneapolis, first vice-president, has been prominent among the architects of the West for many years. Louise Bethune, of Buffalo, the second vice-president, was elected because of her worth as an architect, and the valuable association work she has done; and the members of the board of directors were carefully chosen.

ON the whole, we think the selections made for officers and members of committees for the ensuing year to have been quite happy, and that the administration will be as efficient as that of any preceding year. With all the respect which we entertain for the ability, strength of mind and dignity of character of the newly-elected president, we cannot but regret that an ill-timed, ill-considered and, though perhaps not from the standpoint of its movers, unjustifiable act of protest against an imagined but not existing outside influence upon the action of nominating committees, caused the defeat of the official nominee for the presidency, than whom we believe there is not one in the association better qualified for the duties of the presiding officer of this association, by intellectual capacity and attainments, by innate pluck, perseverance and industry, and an indomitable resolution to bring to a successful issue every task and duty undertaken, and with the address and experience in handling affairs and men, than Mr. Burnham; and while we believe that the Western Association has vitality, strength and momentum enough to exist and to grow, and to achieve success, no matter who is its president, yet we think its progress would have been augmented had the counsel of the regular nominating committees been followed by the convention.

Fifth Annual Convention of the Western Association of Architects.



THE fifth annual convention of the Western Association of Architects convened at the assembly room in the Leland Hotel, Chicago, November 21, pursuant to the call of the secretary, and in accordance with order of adjournment of the previous annual convention, held at Cincinnati, November 16, 1887.

President Sidney Smith, of Omaha, called the convention to order at 11 A.M.

The Chair: Gentlemen, you will please come to order, as the hour has arrived for the opening of this convention. The secretary will call the roll.

Secretary Normand S. Patton, of Chicago, proceeded with the roll call. Thirty-nine members answered to their names, after which the president delivered his opening address, as follows:

PRESIDENT'S ADDRESS.

Gentlemen, Members of the Western Association of Architects:

Fully recognizing the honor and responsibility of the position you saw fit, a year ago, to confer upon me, and when I think of the ability and high standing of my predecessors, it is with feelings of the greatest anxiety and solicitude that I address you on this occasion, being the fifth annual meeting of an association that was founded in doubt, nurtured and carefully attended in its infancy by a band of earnest, zealous men, many of whom have sacrificed personal advantage in their desire to promote the interests and good of the many, until, at this time, it has vindicated its right and proved its strength and potency for good, and still more so for future usefulness; that it has attained the name—and rightly, too—of the Young Giant of the West.

But there is still much to be done before we, as members of this association, can rest from labor; much has to be done before the profession can receive that universal recognition that is accorded by the members of our noble profession in the Old World, and to other practitioners of law, medicine and science in this. True, much has been done to advance the standard of the profession since the foundation of the pioneer association—the American Institute in 1857. This, however, has been due in a great measure, if not chiefly, to the establishment of the good-fellowship among its members that has led to professional esteem and healthy rivalry, in place of a certain distrust formerly existing among members of the profession personally unacquainted with each other. Toward this end I cannot but think that it is of the utmost importance and absolute necessity that all the architectural societies of this country should form one consolidation or confederation, and should be under one direction, governed by one code of ethics. It should embrace in its ranks, as nearly as possible, every reputable practitioner of architecture in the United States who can comply with the code of ethics so established. It should be possessed of a fund sufficient to support a bureau of professional information and legal advice for all its members. This confederation will then be powerful enough to make its influence felt in the formation and passage of building laws, and its recognition by municipal, state and general legislative bodies to a voice in the passing of laws governing the general construction and sanitary arrangements of its buildings; to carry on, and, if possible, to enforce to its end the good work commenced and ably prosecuted by the joint committees of this association and the American Institute the past two years.

To accomplish this desirable object your attention will be especially directed. I would more especially address myself to those members of the association who were present at its inception—who have stood firmly by it—guided its policy, and made its record what it is, and who feel a justifiable pride in its growth and development, not to let that feeling induce them to oppose a merging of the same with the American Institute, but rather to bring to the new organization the vitality and enterprise that will impart to it all the characteristics which have thus far so favorably distinguished the policy of the Western Association of Architects from its venerable confrere.

The joint committees of Western Association, American Institute and the National Association of Builders have done excellent work during the past year, inasmuch as they have devised and adopted a uniform contract that has met with general approval. The committee's action has been indorsed by the American Institute and will be submitted for your consideration, approval and adoption.

The Committee on Code of Ethics for professional practice will also submit the results of their labors, to which I beg you will give your earnest attention. Much time and labor has been given to this subject by the chairman and members, recognizing as we do the necessity of some strongly formulated code, the rigid enforcement of which will do much to avoid the misapprehension and estrangement which the complex relationship hitherto pertaining to the architectural practice, apart from the regulation of fees and competitions, has engendered.

It is much to be regretted that so little effective progress has been made toward a satisfactory solution of that much-discussed and vexed question of competition. The failure of this is very aptly illustrated by the recent very unsatisfactory conclusion of a competition at Minneapolis and the developments of the Congressional Library Building at Washington. This may, however, be offset by the satisfactory means adopted at Kansas City and the Soldiers' Monument at Indianapolis.

A bill has passed the senate and is now before the house of representatives for the establishment of a national art commission to report on plans of public buildings, the full text of which has already been published. A similar commission should be established in all large cities or communities, in connection with our present crude system of public inspection, that will insure correct design and proper construction.

It seems to be imperative that active steps should be taken to insure the appointment of a competent clerk of works on all large and important buildings, both public and private, several cases having lately occurred that demonstrate this fact to all thinking minds, not only in the profession, but the public generally. The question may, however, be asked: What is a clerk of works and what are his duties and responsibilities? To this I would say that at the proper time a clear definition of such duties will be offered for your consideration instead of occupying your time at this stage of the proceedings.

In conclusion, I would say we have much cause for congratulation at past success and inducements for further efforts for the advancement of the profession, and may your efforts at this convention meet with the success desired.

The reading of the minutes of the previous convention were dispensed with, as they had been published in full by an architectural journal and in

the proceedings of the Association, and the board of directors made the following report through its chairman, John W. Root, of Chicago:

REPORT OF THE BOARD OF DIRECTORS OF THE WESTERN ASSOCIATION OF ARCHITECTS.

GENTLEMEN,—We have the honor to report as follows:

The question of paramount interest which arises before this convention, and which has more or less occupied your minds during the past year, is the proposed union between the Western Association of Architects and the American Institute of Architects. This question is of such great importance as to take precedence of all others. If the union is consummated, very extensive modifications become necessary in your constitution and by-laws, and in your general methods of procedure. Upon your president devolves the appointing of a committee, to conform with a similar committee from the Institute, whose duty it shall be to map out a general plan of the union, and to call a joint convention of both bodies to ratify their action. You will readily see the grave importance of the work intrusted to this committee.

We desire to call your attention to a paper read by Mr. Sullivan before the Illinois State Association on the value to the profession of a state league for mutual legal assistance. This question has been several times raised before the American Institute, and the suggestions embodied by Mr. Sullivan in his paper have been indorsed by the Illinois State Association. It may, perhaps, be well for you to give consideration to the subject, as there seems to be a general idea in the profession that some such league would be valuable.

We recommend to you the election as a body of the Architectural Association of Western New York. These gentlemen have organized a strong working body, and the universally high character of each member—nearly everyone of whom is personally known to your board of directors—leads us to recommend that they be admitted as an organization.

From many sources the suggestion has come to us that we determine upon a permanent place of meeting for your conventions. If such a place should be determined upon, Chicago would probably be selected.

A year ago a committee was continued having in charge a code of ethics for the general guidance of the members of the Association. The report of this committee will doubtless be of interest, as is every move toward elevating the standard of architectural practice, and of the personal character of the profession.

In this connection we desire to mention a late competition for a prominent public building in one of our large western cities—where a number of designs presented so closely follow a large building located in an eastern city as to suggest that you cannot too soon take a firm and definite stand in relation to certain matters of practice about which too many architects are now lax.

Many of you have doubtless received from the chairman of the Grant Monument Committee, Alonzo B. Cornell, a circular asking competitive sketches for this monument. The terms stated in the circular were such that on behalf of the Association we wrote to Mr. Cornell protesting against his position, and indorsing a circular previously sent to him by the Architectural League of New York. The letter sent to Mr. Cornell was signed by your president and by the board of directors, and in it we inclosed copy of code on competitions. Several similar letters have been sent to other persons in less important cases.

At the last meeting of the American Institute a resolution was presented by Mr. Preston, which was passed, calling attention to the desirability, in all important buildings, of a clerk of the works. A committee of three was appointed to take this matter in hand, and it may perhaps be well for you to appoint a similar committee for conference with them.

Many of the members have written to us and to the secretary, asking that there be issued to them a certificate of membership. We would suggest that your secretary be empowered to prepare such a certificate in blank, submitting it for approval to the board of directors, and that this certificate be each year filled out by the secretary and forwarded to each member in good standing.

We will recommend to you that you change your constitution and by-laws in the following respects:

First, that the term of office of your secretary be changed from one to three years. At present his labors are greatly augmented by the fact that he has to expend considerable time in learning the personnel of the Association and the entire preliminary work necessary for the efficient discharge of his duty. By a longer incumbency his labors will be greatly lightened and his efficiency increased.

We recommend that Sec. 13 be omitted from the constitution; that Art. 7 be modified by omitting the last clause, "at the next meeting"; that Art. 8 be modified to read: "All applicants for membership recommended by the board of directors are to be voted on by letter ballot," as specified by the convention of November 16, 1887, and thirty days are to be allowed members in which to return their ballots; that Art. 9 be omitted; that Art. 12 be modified by adding to it, "subject to approval of the board of directors"; that Art. 13 be omitted.

We have authorized the Committee on Legal Decisions to expend upon their work such funds as may be necessary, to the extent of \$100, subject to the approval of the chairman of the Committee on Legal Decisions. The amount to be expended will probably be not so great as this.

We desire to call your attention to an exhibition of drawings given by the Chicago Sketch Club in the old Art Institute building on Van Buren street. The Chicago Sketch Club is a very flourishing organization which is doing remarkably good work. The present exhibition, we think, is most creditable indeed. In some respects it is a very remarkable evidence of the progress made by the Sketch Club. We trust that each one of you will visit this exhibition.

We recommend for election Mr. James Keys Wilson, of Minneapolis.

Lunches will be served each day during the convention, at Kinsley's restaurant, on Adams street.

On Thursday and Friday the Association, at these two lunches, will be the guest of the Illinois State Association.

JOHN W. ROOT, Chairman.

After a motion that the report be received and printed, to facilitate its discussion, was discussed, and during which it was ordered that all resolutions be submitted in writing, a committee, consisting of the president and Mr. Adler, was appointed to print such reports and other matter as seemed desirable. The report of the committee on metric system was then called for.

Secretary Patton (chairman of committee): I have the report ready, but have left it at my office. I will have it this afternoon.

Mr. Root: I think the reports are not in very good order for presentation. As the several members have so lately arrived, there has been no opportunity for consultation. I think it is best to defer the reports until later.

The Chair: There are some communications to be read, which might be listened to now.

Secretary Patton: Mr. President, I have a letter from Mrs. Walters, the wife of the late Thomas U. Walters, in relation to the memorial testimonial of this association:

PHILADELPHIA, April 26, 1888.

MR. NORMAND S. PATTON, Secretary of the Western Association of Architects:

DEAR SIR,—Please convey to the Western Association of Architects my grateful appreciation for their handsome testimonial of respect to my late husband, which I received today.

You have spoken very beautifully of his life, that we feel grateful to learn that he was so highly esteemed by his associates.

Very respectfully,

MRS. T. U. WALTERS.

Charles E. Illsley: I move you, Mr. President, the communication be received and placed on file.

Mr. Sullivan: I would suggest to amend the motion by ordering it spread upon the records.

The amendment was accepted and so ordered.

Communications were also read from W. H. Sayward, secretary of the National Association of Builders, and others, expressing their regrets at

not being able to attend the convention, which, on motion of Mr. Root, were received and placed on file.

Mr. Root: I move that when we adjourn, we adjourn until 2 o'clock. There is to be a lunch served at Mr. Kinsley's restaurant at 1 o'clock. It is now nearly 12.

Mr. Yost: I understand there is a proposition to come up, at the suggestion of the board of directors, to admit to membership of this association the Western Association of New York as a body. Would it not be well to do that now, so that they be made members at once, that those present may be able to participate in this convention. I move that the Western Association of New York be admitted to this association as a body.

Mr. Sullivan: Have we a list of the members of the Western Association of New York?

The Chair: Yes, there is a list of the names of the members of that association published in the last number of THE INLAND ARCHITECT.

The secretary read the names from the published list.

Secretary Patton: Some of these persons are already members of this association.

Mr. Yost: I move the secretary be instructed to cast one ballot for the convention for the admission of such as are not already members of this association.

Mr. Sullivan: I rise on a question of information. I think it might be well as a matter of form to have the list attested by the officers of that association, that we may know there is no person on the list who is not a member of that organization.

The Chair: Mr. Carlin, the secretary of that association, is present, and he can attest to the names.

W. W. Carlin: The list of names as read, I think is correct. The list was signed by both the president and secretary.

After some discussion, on motion, the matter was made the first order of business for the afternoon session. The meeting then adjourned to 2:30 P.M.

FIRST DAY—AFTERNOON SESSION.



The president, Sidney Smith, called the convention promptly to order at 2:30 P.M.

The Chair: Gentlemen, the first business in order, by the resolution passed this morning, is the election of the membership of the Western Association of New York to membership of this association. We have here the official list of the membership of that body as certified to by the secretary, Mr. Carlin.

J. W. Yost: I move you, Mr. President, the secretary of this association be instructed to cast one ballot for the names included in this certified list—that is for such persons as are not now already members of the association—electing them to membership of this association.

The motion was duly seconded.

The Chair: Gentlemen, you have heard the motion; are you ready for the question? It has been seconded.

W. W. Carlin: I wish to state, Mr. President, that the certified list does not include any names of those who are already members of the Western Association.

The Secretary read the following as the certified list of names: W. H. Archer, Buffalo; Otto Block, Rochester; E. M. Buell, Syracuse; H. C. Burdett, Buffalo; C. F. Crandall, Rochester; E. A. Curtis, Fredonia; Noah Dillenbeck, Syracuse; O. W. Dryer, Rochester; J. M. Elliot, Syracuse; J. Pay, Rochester; John Falkner, Buffalo; John Hose, Watertown; J. P. Johnston, Ogdensburg; D. D. Kieff, Watertown; J. H. Kirby, Syracuse; B. T. Lacey, Binghamton; Asa L. Merrick, Syracuse; Geo. J. Metzger, Buffalo; C. Francis Osborne, Ithaca; W. H. Richardson, Rochester; Wm. C. Walker, Rochester; Geo. W. Baxter, Syracuse; Joseph Blaby, Palmyra; Thos. Birt, Utica; J. R. Church, Rochester; Charles E. Colton, Syracuse; G. Edwin Cooper, Utica; Otis Dockstader, Elmira; W. Foster Kelly, Rochester; T. I. Lacey, Binghamton; J. H. Marling, Buffalo; Thos. Nolan, Rochester; Edward A. Kent, Buffalo; J. H. Pierce, Elmira; Louis P. Rodgers, Rochester; Jas. A. Randall, Syracuse; W. S. Wicks, Buffalo.

The Chair: Are there any further remarks before a vote is taken? No further remarks being made, the vote was taken, resulting in the motion being carried, only one vote being in the negative.

Secretary Patton: Mr. President, I announce that I have cast the ballot as instructed for the gentlemen whose names appear on said list, and who are now members of this association.

The Chair: I will now announce the Committee for the Nomination of Officers and the Committee on Time and Place of Meeting. The first committee is: James F. Alexander, of Lafayette, Ind.; F. G. Clausen,

Davenport, Iowa; H. Lord Gay, Chicago; F. S. Allen, Joliet, Ill.; Edward S. Hammatt, Davenport, Iowa. The second committee: Chas. E. Illsley, St. Louis, Mo.; Henry C. Lindsay, Zanesville, Ohio; J. L. Silsbee, Chicago, Ill.; Sidney J. Osgood, Grand Rapids, Mich.; W. W. Carlin, Buffalo, N. Y.

The next order of business is the reports of standing committees. The Committee on Metric System is the first on the programme. Mr. Patton is the chairman.

Mr. Normand S. Patton then read the following report from that committee:

REPORT OF THE COMMITTEE ON THE METRIC SYSTEM.

To the Western Association of Architects:

Last year your Committee on the Metric System made a request of the Boston Society of Civil Engineers for their coöperation in a petition to congress for the exclusive use of the metric system, by the departments of the government.

In answer to this request the Boston society, at its regular meeting, November 16, 1887, directed a canvass to be made of its members for the purpose of ascertaining their opinion regarding weights and measures. The rules of the society require the assent of two-thirds of the whole number of members in order to bind its action.

There were replies received from only forty-two per cent of the members, and, therefore, led to no action; but the following analysis of the replies made by their committee on weights and measures is of sufficient interest to bear repeating.

OPINIONS OF MEMBERS OF THE BOSTON SOCIETY OF CIVIL ENGINEERS.

QUESTIONS.	Affirmative.	Negative.	Doubtful.	Total number of answers.	Percentage of affirmative answers.
(A) Whether it would be worth while ultimately to abandon many customary units, to secure uniformity and system in place of the existing irregularity?.....	79	2	81	98
(B) Whether the uniform system of the United States ought ultimately to be as exclusively decimal in its ratios between units of the same class as United States money is now?.....	73	8	81	90
(C) If the United States and foreign nations would all adopt the same system, whether the advantage to the United States over that of an equally good system peculiar to itself would be great enough to justify the United States in incurring a considerable increase of trouble and expense?.....	68	9	2	79	86
(D) Is the ultimate exclusive adoption of the metric system throughout the United States desirable?.....	57	19	4	80	71
(E) As to the Boston Society of Civil Engineers, as a body, joining with the Western Association of Architects in a petition to congress, as proposed by them, for the adoption of the metric system of weights and measures by the departments of the United States government?.....	49	30	2	81	60
(F) Further opinions on weights and measures.....					

The full report of the committee on weights and measures of the Boston Society of Civil Engineers has already been sent to members of this association, and we forbear to make further extracts, except to quote one sentence from a member who says that he is doubtful about the metric system. He concludes: "What I desire on this question is more evidence from unprejudiced business men of foreign countries who have *actually been through the change*." We are happy to have a little testimony of this nature, for which we are indebted to Mr. Adler of our association. Mr. Adler writes:

"N. S. PATTON, Esq., Chairman of the Committee on the Introduction of Metric System of Weights and Measures:

"MY DEAR SIR,—In obedience to the promise made you, I made inquiries during my stay in Germany last summer, as to the difficulties encountered in the introduction of the metric system in that country. These inquiries were directed particularly to two points: First, whether there were any serious inconveniences and disturbances incidental to its first introduction, i. e., whether at first it had been found difficult to those accustomed to the use of the old system to think and express their thoughts and knowledge under the new system. The other point was, whether any inconveniences resulted from the decimal division and its failure to lend itself readily to a division into halves, quarters, etc. Upon both of these points, the answers received from architects, manufacturers, engineers and merchants, whom I consulted, were favorable to the metric system. I was told that comparatively few errors were made in the earlier days of its use; that even the older people who had grown gray in the use of the old system, had found no serious difficulty in adapting themselves to the new weights and measures, and that these older persons appeared to prize the new system more highly than the younger people who had never known the intricacies and difficulties of the old systems of weights and measures.

"As to the second point, I found some difference of opinion, but there was a great preponderance of evidence to the effect that no inconveniences had resulted from the necessity for calling a half five-tenths, or a quarter twenty-five one hundredths, etc.

"On the whole, all united in the statement that had the difficulties incidental to the introduction of the metric system been ten times as great as they were really found to be, the resultant advantages would have much more than outweighed them, and that for no consideration would they wish to return to the old system. Very truly yours,

"D. ADLER."

Mr. Adler added, in a conversation, that even the Anti-Prussian Germans admit that the introduction of the metric system is a blessing for which credit must be given to the Prussian ascendancy.

There is one fact that seems to be overlooked by the advocates of a subdivision into halves, quarters and eighths, namely, that when we go farther, to sixteenths, thirty-seconds and sixty-fourths, we lose in simplicity as compared with a decimal system. Eleven sixteenths is not much better than sixty-nine hundredths. Twenty-nine thirty-seconds is certainly less expressive than ninety-one hundredths, and forty-seven sixty-fourths as compared with seventy-three hundredths, is both inexpressive and inconvenient.

It would be a mistake to conclude, from the fact that there is little popular clamor for the metric system, that no progress has been made toward its use in this country. Standard meters and metric weights and measures of capacity have been manufactured by the United States Coast Survey and distributed to the various states, and in many ways progress has been made toward the adoption of the new system.

The chairman of your committee, during a visit to Washington last summer, saw the heads of several of the government departments in reference to their attitude toward the metric system. The opinion in each case was favorable, but was coupled with the suggestion that it would not be politic for any department to take the initiative in this matter. If congress shall see fit to order the introduction of the metric system in the various bureaus, it is not likely to meet with any opposition from the officials.

Several members of congress were consulted, but there seemed to be no chance of getting action on this subject during a political campaign. In order to secure the attention of congress, a definite bill must be formulated and presented early in the session.

The next year is likely to see an advance in the use of the metric system as a result of a bill approved by the president on the 24th of last May, authorizing a conference of the various governments of North and South America to consider the formation of an *American Customs Union* and the adoption of a uniform system of weights and measures. If this conference shall result in the adoption of the metric system by our custom houses, it will be an entering wedge that will widen rapidly the opening for the universal use of the system.

NORMAND S. PATTON, Chairman of Committee.

The Chair: The report of the committee will be placed on file to be taken up in regular order for further action. The report of the Committee on Uniform Contracts is next in order.

W. W. Clay: Mr. Chairman, I notice the chairman of that committee, Mr. Treat, is not present, and that will have to be passed.

The Chair: We will pass it for the present. The report of the Committee on Consolidation is now in order, but as the chairman, Mr. Adler, is not present, we will pass that, too, for the present.

The report of the Committee on a Code of Ethics for Professional Practice is next in order. Mr. Sullivan, the chairman, is present, and we shall be pleased to hear from him.



L. H. Sullivan: Mr. President, of this committee of which I am the general chairman, there are forty-eight members, fourteen members of this state. The scheme laid out was that the members from the different states, of which it was composed, would form sub-committees, each with a chairman, and these were to report to the general chairman for revision, who was to return it to them for their further consideration. I have allowed things to take their natural course, and have heard nothing from them, and the sub-committees have also allowed things to take their natural course and have heard but little from me. When I perceived how matters were drifting, I thought personally to take matters in hand, but on further consideration I thought best not to do it. I still think the scheme a good one, and I certainly believe a code of ethics should be adopted. I have thought of what it should be in a general way, that it should cover the several specialties of professional practice. In the first place, it should relate to the artistic side of the practice, and, in the next place, it should point out the architect's place as a business man. It should state when one architect is having business relations with a client, that that shall be a sufficient warning that interference on the part of another architect is non-professional and not allowable. Such a code, I think, should be reported as would prevent one member to war against another, and stimulate all to honorable professional action. Fourth, and the most important of all, it should distinctly point out the relation of the architect to the public. I think it should very distinctly outline the architect's course of action toward his client. The great difficulty, and the complication of the whole matter in getting at some action by this committee, has been, in my opinion, the cumbersomeness of the committee. I think it should be cut down in numbers. By experience I have found that the larger the committee, the smaller the amount of work done. "What is everybody's business is nobody's business." A few men naturally feel a pride in what they are selected to do, and work for the best results, realizing that something is expected of them. This question also comes up in view of the proposed consolidation of the American Institute of Architects and the Western Association of Architects, and should we by advocating the adoption and promulgation of such a code by taking the initiative in a step which will meet the approval of all reputable architects—an initiative we can, as an association, take pride in—a good deal will be done in that direction, and certainly no harm can be done. I think more and more of the worth of such a code—more than I did one year ago, and I am in favor of it, and hope to see its realization in a year from now.

The Chair: In view of there not being an official report from this committee, the remarks of Mr. Sullivan will be accepted as a partial report. We will, we hope, take this subject up later. It is too valuable a subject to let pass without some further consideration. The report of the Committee on Bill Governing Office of Supervising Architect is in order. Mr. Adler, the chairman, is absent, and we will pass it for the present. The next report in order is from the Committee on Statutory Revision. Mr. Adler is also chairman of this committee. The report of the Committee on Statistics of Competitions will now be heard. Mr. Illsley is the chairman.

Charles E. Illsley, chairman, said that the committee had no report to make.

The Chair: The report of the Committee to Collect Legal Decisions Relating to Building Interest is next in order. Mr. Hellmers is the chairman.

W. W. Carlin: Mr. President, I have the honor of being a member of that committee from New York State. I have been notified by Mr. Hellmers that there will be a meeting of this committee this evening, and we will be ready to report tomorrow.

The Chair: There being no other reports, there is another matter of business that might be taken up now—the election of one or two members who have been proposed. We have a communication from Messrs. Smithmeyer & Pelz, of Washington, D. C., which the secretary will now read.

WASHINGTON, D. C., November 16, 1888.

NORMAND S. PATTON, Esq., Secretary Western Association of Architects, Chicago, Ill.: DEAR SIR,—The time and occasion are propitious for a concerted action of our organizations, east and west, to secure to the members of our profession a fair treat-

ment and an equivalent compensation for their services when employed by the legal authorities of the land, and also to elevate the standard of our profession at large. We therefore inclose to you a copy of a communication, or memorial, that we have addressed to the board of trustees of the American Institute of Architects, of which we are members, recounting, briefly, the facts of the case, and begging that they will take certain action. We trust we may have your coöperation, and that you will bring the matter to the attention of your body, also. By so doing, you will greatly oblige,

Yours very truly,
SMITHMEYER & PELZ.
P. S.—We have sent a copy of this statement to the "Architectural League," of New York City, with the request to take action.

WASHINGTON, D. C., November 16, 1888.

To the Board of Trustees, American Institute of Architects, New York City:

GENTLEMEN,—During the last session of congress, the erection of the new Congressional Library Building was virtually placed in the hands of the chief engineer of the United States Army, to whom is transferred all responsibility for plans, specifications, etc. It is provided, however, that the building to be erected shall not exceed in cost four (4) million dollars, and that the secretary of the interior shall adjust the compensation for the plans of the building submitted by the undersigned to congress, and accepted by that body.

The reasons for this action of congress are well known to the profession—the refusal of the architects to accept from the contractor work and materials not up to the requirements of the specifications.

Private parties erecting buildings would have exacted and demanded of the architects action such as this, but, unfortunately, as the profession is too well aware, a different rule too frequently obtains in public affairs. "Influence" is the governing power, and he or they who cannot command this pernicious and subtle power generally come to grief. To those who are familiar with Washington methods, little more need be said. The contractor had more "influence" than the architects, and the latter went to the wall. The architects propose to accept the situation, recognizing that it is of no use to "kick against the pricks." One point, however, interests the profession generally, and that is: How should the compensation of architects for services such as we have rendered be determined? A brief statement of these services will be of interest.

In 1873 congress invited plans for the building, offering premiums for the three best ones. The prospectus called for line drawings on a scale of one sixteenth of an inch to the foot, and stipulated that the exterior walls should be within a space of 270 by 340 feet. Twenty-eight plans were submitted to congress by the profession from this country and from England, the result being the awarding of the first premium to ourselves, and consequently the selection of our plan. That session of congress adjourning without making an appropriation for the building, the matter went over to the next congress, and consequently to new committees. Of course, new committees would have new ideas, or whims, which they would like ingrafted on the plans. We would endeavor to meet these whims, or suggestions, and so for a period of thirteen years, from one congress to another, we would modify, change, curtail, enlarge, etc., etc., to conform to the ideas of the "powers that were." In this endeavor no less than twelve different designs of the exterior were prepared in various styles of architecture, in Gothic, Romanesque, French, Italian, German, Renaissance, etc. Vast numbers of plans, sections and studies were made and submitted to try and satisfy the various tastes of the members of the committees, until finally the congress of 1886 adopted the plan in the Italian Renaissance style, naming our plan specifically in the act. For all these plans, for our services as expert architects requested by these congressional committees, extending through a period of thirteen years, and for the heavy and onerous expenses to which we have consequently been subjected (including a trip to Europe by the senior partner, for which only traveling expenses were allowed) no compensation has been paid or allowed.

Under the recent act of congress, the Secretary of the Interior is to determine what this compensation shall be. The profession are interested in the decision, and particularly in the manner in which he will arrive at the same.

We submit that the American Institute of Architects, as a representative body of the profession in this country, should naturally be consulted. It is a technical question and should be considered from a high standpoint. The dignity of the calling is involved and the question considered whether architects, in the proper discharge of their duties, have no rights that legislative or municipal bodies are bound to respect. There is no remedy excepting within ourselves. The only way to correct these abuses is for the profession to take a proper stand and insist upon just and proper treatment for its members. To this end we address your honorable body. We request that you examine into all the circumstances of this case and be prepared to submit to the Secretary of the Interior, or to some other tribunal, as circumstances may demand, your opinion of the value of the plans and our services.

If you will kindly consent to do this we will place you in possession of all the facts in the case, and the drawings, sketches, etc., necessary, for a full understanding of the same. With high regard, we remain, your humble servants,

SMITHMEYER & PELZ.



The Chair: This communication might be taken up with the report of the Committee on the Bill Governing the Supervising Architect, or referred to Mr. Adler, the chairman of that committee.

John W. Root: Do I understand, Mr.

President, that it is proposed to refer it to that committee?

The Chair: Yes, the report of that committee has not been made yet, and it might be considered in the discussion of that report.

We have had the reports of the Committees on Metrical System, Code of Ethics and Statistics of Competitions. If the convention pleases, you can now take them up for discussion. The first is the report on the metrical system.

Mr. Vost: I would like to inquire what the committee has recommended this association to do in the matter of the metrical system. If they wish any action to be taken by this association, I did not so understand further than the acceptance of the report made.

Mr. Patton: I do not know that anything can be done by the association except to show that it still favors the metrical system by continuing this or some other committee with like powers. It is a subject that will take some years to bring about the object sought for. This association has accomplished something already toward that end. We have stirred up considerable interest, at least with the Boston Civil Engineers Association, which seems to be an organization of considerable influence, and their recent action show them to be in accord with us. I think we should keep up the interest we have shown and seek every opportunity to push the movement forward. I don't know but I feel that this or some other committee should be appointed to continue the work.

H. W. Hill: I think it would be well for the members of this association to say that it would be a good thing for the country at large if the metrical system was adopted, and by a vote instruct the chairmen of the different state associations to communicate with their respective members of congress, urging them to have the matter brought up in congress and to work for its adoption. I will offer a resolution to that effect:

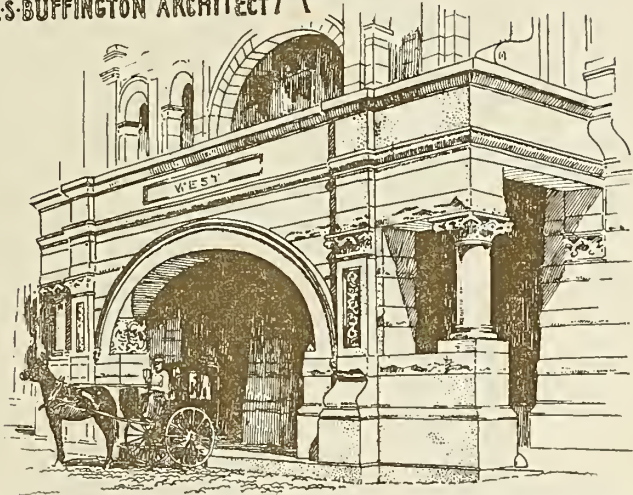
Resolved, That the chairmen of the different state organizations and associations be requested to communicate to the congressmen of their respective states the opinions of this association in regard to adopting the metrical system throughout the United States, and request them to have this important subject referred to the proper committee of congress.

The resolution of Mr. Hill being put by the chair to vote, carried unanimously.

Charles Crapsey: I would like to inquire what is the opinion of this association of the metrical system?

Secretary Patton: This convention two years ago expressed its opinion by appointing a committee and adopting a resolution in favor of the metrical system and for enlisting other bodies with us to petition congress to make the metrical system compulsive. A year ago this committee was continued.

CARRIAGE PORCH WEST HOTEL MINNEAPOLIS
L.S. BUFFINGTON ARCHITECT



The Chair: We are now ready to hear the report of the Committee on the Consolidation of the Architectural Association of America. Mr. Adler, are you ready?

Dankmar Adler, as chairman, read the following report:

REPORT OF THE COMMITTEE ON CONSOLIDATION OF ARCHITECTURAL ASSOCIATIONS.

Your committee begs leave to report that it has given careful consideration to the subject intrusted to its charge. That, believing the consolidation of all the architectural associations of this country into one united body in the highest degree desirable, it placed itself in communication at once with the corresponding committee of the American Institute of Architects. That it formulated a scheme for the consolidation of all associations whose standard of membership was as high as that of the Western Association of Architects. That this scheme of consolidation was submitted to the committee of the American Institute of Architects, and by it substantially indorsed, and, with comparatively slight modifications, submitted to the convention of the American Institute of Architects held in Buffalo during the last month. That the chairman of your committee was present at the Buffalo convention, and that the Institute thereat, after much discussion, unanimously adopted the following resolution:

Resolved, That the committee of the American Institute of Architects upon consolidation of architectural associations be continued, and that it be directed to act with the corresponding committee of the Western Association in determining a definite plan of consolidation in the next six months. It is further resolved, that when this plan of consolidation has been determined upon and approved by the board of trustees and directors of the American Institute of Architects and Western Association of Architects, the same shall be printed, and copies of the same distributed among the practicing members of both bodies. It is further resolved, that within one month from the distribution of these printed copies of the committee's report, there shall be a letter ballot upon its adoption by the practicing members of the American Institute of Architects and Western Association of Architects, and that if approved by a two-thirds vote of both bodies it shall be declared adopted, and the two bodies consolidated under its provisions. The board of trustees of the American Institute of Architects and the board of directors of the Western Association of Architects shall, in case of such adoption, at once issue a call for a convention of the members of both bodies to be held at such place and at such time as may then seem most expedient, and a reorganization of the American Institute of Architects shall be the order of business of said convention.

Your committee further reports, that for many good and sufficient reasons, the retention of the name of "American Institute of Architects" for the united and reorganized associations has been made a part of its scheme of reorganization, and is recommended to your favorable consideration; that its plan of reorganization recommends the retention for the united and reorganized association of the standard of admission to membership now fixed by the Western Association of Architects, and that the government of the new organization shall be as democratic, and its policy as liberal, as that which has characterized the history of the Western Association of Architects.

Inasmuch as it is important that this Association act in concert with the American Institute of Architects, and inasmuch as the committee acting on behalf of the American Institute of Architects, under the foregoing resolution, is a committee of three, your committee recommends the passage of the following resolution:

Resolved, That the action of our committee on the consolidation of architectural associations during the past year be, and is hereby, approved, and the committee discharged.

Resolved, That the Chair appoint a committee on the consolidation of architectural associations, which committee shall consist of three members, and that this committee be directed to act with a corresponding committee of the American Institute of Architects in determining a definite plan of consolidation within the next five months. It is further

Resolved, That when this plan of consolidation has been determined upon and approved by the boards of directors and trustees of the Western Association of Architects and the American Institute of Architects, the same shall be printed and copies of the same distributed among the practicing members of both bodies. It is further

Resolved, That within one month of the distribution of these printed copies of the report of the joint committee, there shall be a letter ballot upon its adoption by the practicing members of the Western Association of Architects and the American Institute of Architects, and that if approved by a two-thirds vote of both bodies, it shall be declared adopted and the two bodies consolidated under its provisions. The board of directors of the Western Association of Architects and the board of trustees of the American Institute of Architects shall, in case of such adoption, at once issue a call for a convention of the members of both bodies, to be held at such time and at such place as may then seem most expedient, and a reorganization of the American Institute of Architects shall be the order of business of said convention.

D. ADLER, *Chairman of Committee.*

The Chair: As the order of business calls for the discussion of these papers tomorrow morning, we will simply place them on file at present. We will now hear the report of the Committee on Statutory Revision, of which Mr. Adler is the chairman.

Mr. Adler read the following:

THE ANNUAL REPORT OF THE COMMITTEE ON STATUTORY REVISION OF THE WESTERN ASSOCIATION OF ARCHITECTS.

The work of your committee has been entirely suspended during the past year, chiefly because it was found that the political excitement due to the presidential election

made it impossible to secure the attention of the public or of legislators to the statutory reforms in the introduction of which your committee was interested.

Your committee has nothing to recommend, except a reiteration of that part of its former reports which calls the attention of every member of this association to the fact that if legislation in the interests of establishing an official standard of professional proficiency is to be obtained, this cannot be done by the labors of a committee only, but it will require the united, energetic and persistent efforts of every member of this association, each working in his own way, to awaken in the minds of all with whom he comes in contact, a realization that it is as necessary for the state governments to establish a standard of minimum qualifications among the practitioners of architecture, as the establishment of such standard has been found salutary with the case of physicians, apothecaries and lawyers.

Your committee must again call your attention to the futility of all effort at securing or enforcing legislation unless there is a healthy, strong public sentiment in thorough sympathy with the same. Legislators are not ready to enact laws merely because our association, or its representatives, demand them, no matter by how good and strong arguments our demand may be supported. Our state legislators, if they have a proper conception of their duties, should consider themselves the exponents of the wishes of their constituents, and be ready to enact new laws only if they can become convinced, not only that such laws are good in the abstract, but also that there is a positive desire for their enactment among a considerable portion of the people.

D. ADLER, *Chairman of Committee.*

The Chair: Mr. Adler, we will call on you for the report on the Bill Governing Office of Supervising Architect.

REPORT OF THE COMMITTEE ON SECURING A REFORM IN THE CONDUCT OF THE ARCHITECTURAL PRACTICE OF THE UNITED STATES GOVERNMENT.

Two of the members of your committee, together with representatives of the American Institute of Architects, had conferences at New York and at Washington, and made sundry modifications in the draft of proposed bill adopted by a previous convention of this body, but found, upon inquiry at Washington, that there was no sympathy with our movement in the Committee on Public Buildings and Grounds of the House of Representatives of the Fiftieth Congress. The members of this committee were chiefly from country districts, many from the South, and not sufficiently familiar with the great buildings erected in our cities. The government buildings at Washington and the government buildings about the country were considered by them the *ne plus ultra* of architectural achievement. It was therefore found impossible to convince them that there was aught in the character of the buildings erected by the government that demanded a change in the methods pursued in their design or administration.

Besides, neither the political press of the country nor the business public had expressed dissatisfaction with existing methods to a sufficient extent that their expressions of discontent could have been used by us as arguments in favor of the reforms which we proposed. We therefore believe that every member of this Association and of the American Institute of Architects should constitute himself a committee of one, charged with the duty of calling forth from individual citizens and from the press expressions of opinion upon a system under which the government of the United States cannot employ in its professional service architects of as high standing and as great professional and business ability as those employed by wealthy corporations, or even by the average private citizen.

D. ADLER, *Chairman of Committee.*

The Chair: Is Mr. Alexander, chairman of the Committee to Organize State Associations, present?

James F. Alexander: We will not be ready to report until tomorrow morning.

Mr. Clay: In the absence of Mr. Treat I will read his report as chairman of the Committee on Uniform Contracts and Specifications.

COMMITTEE ON UNIFORM CONTRACTS.

To the Fifth Annual Convention of the Western Association of Architects:

The undersigned Committee on Uniform Contracts, appointed at your last convention to confer with a like committee from the American Institute and National Association of Builders, beg leave to report as follows:

It was thought by a portion of the joint committee that the work brought before it could be accomplished by correspondence, but this proved to be impracticable, and a meeting was arranged to take place in New York, at the rooms of the American Institute of Architects.

The following named gentlemen represented the Institute: Messrs. O. P. Hatfield, of New York; Alfred Stone, of Providence; and J. H. Windrim, of Philadelphia. The National Association of Builders was represented by Messrs. John S. Stevens, of Philadelphia; John J. Tucker, of New York, and George C. Prussing, of Chicago; this Association by Mr. W. W. Clay, of Chicago; Mr. James F. Alexander, of Lafayette, Ind., and Mr. S. A. Treat, of Chicago.

Mr. O. P. Hatfield was chosen president, and Mr. William H. Sayward, secretary of the National Association of Builders, was appointed secretary.

Several meetings were held, both day and night, and as a result of these deliberations a form was agreed upon. This was again referred to a sub-committee composed of the president and secretary, who were requested to submit the contract to an acknowledged legal authority for suggestions, and then to print and distribute to the members of the joint committee for their reconsideration.

The form which has been so generally distributed among you has been copyrighted, and the sole right to publish placed in the hands of The Inland Publishing Company of Chicago. Arrangements are now being made by this company to place these blanks on sale in the principal cities of the country.

It was the aim of the committee to place before you a form which should combine all the desirable features of the many forms collected by them, and to produce a contract blank which would be acceptable to both owner and contractor. The absence of a certain clause in which the contractor agrees to do everything necessary to fully complete the work, whether shown or not, or the so often implied agreement on the part of the architect to make all decisions in favor of the owner, may be noticed.

Your committee found some difficulty in producing a form which would as well apply to those cases in which one contractor is required to complete all branches of the work, as to those where only one or more branches of the work are to be performed, and experience may suggest some improvement in this direction.

As this blank has been placed before each member, it will doubtless elicit some criticism, and should any member find reasonable objection to its provisions, the chairman will gladly receive and place before the committee any suggestions toward its improvement.

In order to preserve the copyright, it will be necessary to continue this committee, and to this end the following resolution is placed before you for your action:

Resolved, That the Committee on Uniform Contracts be, and is hereby, made a standing committee of this body.

Respectfully submitted,

SAM'L A. TREAT, } Committee on
WM. W. CLAY, } Uniform Contracts.
JAS. F. ALEXANDER, }

The Chair: Gentlemen, as there are but two or three other reports to be received, and as we have just had the report on uniform contracts and specifications, the discussion of that is now in order. I shall be very glad to hear from you on this subject. Most of you have seen this contract and know its provisions, etc.

Mr. Illsley: Mr. President, I move the adoption of the report, including the resolution to continue the committee.

Mr. Sullivan: It seems to me that that should come up under the head of new business. I think the proper way to do is to place the report on file.

The Chair: We are now taking this matter up in the regular order. It has been already accepted. The question now occurs on the motion of Mr. Illsley.

Mr. Adler: If I remember rightly the resolution under which this committee was empowered to act, delegated to it the power, as far as the

preparation of this form of contract is concerned; therefore, unless there are the best of reasons to believe the committee was derelict in the discharge of the duty assigned to them, we can do nothing but accept their report and authorize the continuance of the committee.

Mr. Clay: I would like to ask what was done at the convention of the American Institute? Was the contract adopted and recommended there?

Mr. Adler: Nothing was done. The officers took it for granted, the resolution proceeding from the Institute placed in the hands of the committee the power for their action, and therefore it was binding on the Institute, and that no further action was necessary.

The Chair: Are there any further remarks. If not, we will proceed to vote on Mr. Illsley's resolution. (By unanimous vote it was carried.)

Secretary Patton: Mr. President, I would like to offer a resolution:

Resolved, That the members of this association adopt the "uniform contract" in their practice, and write any improvement in the form that suggests itself, as the result of the same, to the committee.

Mr. Patton: I apprehend we are not in a condition to criticize the form of this contract and can't be until we have given it a fair trial. If we do this, in the course of a few months we may be able to offer suggestions which the committee might gather up and make some amendments to the form that would, perhaps, make it more efficient.

The resolution being seconded and put to vote prevailed.

The chair: The next report in order is on the consolidation of the architectural societies of America, which has been set for discussion tomorrow morning. Perhaps it would be well to take up the next in order, the report of the Committee on Code of Ethics. Or, if any gentleman has any resolutions to offer we might consider them.

Mr. Clay: Mr. President, I move that a committee of one be appointed, as a nucleus, on a code of ethics, with power of increasing its numbers as may be deemed expedient, and, without wishing to be considered at all personal, I would like to have Mr. Sullivan appointed that committee of one.

Mr. Root: Before we vote upon that motion I would like to know what Mr. Sullivan thinks of being made a nucleus.

The Chair: Mr. Sullivan I think is a very valuable member to be continued on that committee.

Mr. Sullivan: I should like to suggest the committee should not exceed three members. I would like to have the convention fix the committee.

Mr. Clay: The convention will fix it as one and that one Mr. Sullivan.

The resolution offered by Mr. Patton, appointing a committee of one and naming Mr. Sullivan, on being put to vote, prevailed.

The Chair: The report of the Committee on Bill Governing Office of Supervising Architect is in order. Are there any suggestions or recommendations to offer? You have heard the report of the committee. What will be your pleasure with it?

Mr. Adler: I wish to say to the convention, with reference to this committee, that it will be entirely useless to maintain the committee and expect any successful results from its work unless the entire association takes upon itself to become a committee to look after its object. We cannot go to work at Washington and secure any legislation upon this matter unless congressmen become convinced the public demands a revision of the existing arrangement. The average congressmen from large cities realize that

the United States Government is at a great disadvantage in the management of its architectural affairs, but the congressmen from large cities are the only ones, or are almost the only ones, who see that it is possible to erect buildings of character and dignity that are adapted to the purposes for which they are intended. But the average congressman from the country districts—and, of course, he is the overwhelming majority in congress—sees but little of building in the larger cities, and knows nothing whatever of the manner of the production of the government buildings he sees at Washington, which appear to him to be the very best that can be produced; does not realize that in New York, Boston, Philadelphia, Chicago, Cincinnati, St. Louis, and other large cities, private citizens and large corporations have erected buildings in which far better results have been obtained than in any that have been erected by the government. Therefore a committee instituted for procuring a reform in this matter is looked upon with a certain degree of suspicion by the average congressman, who thinks the movement is only a scheme of architects who are out of a job, and believe the committee sent to Washington is in the interests of those men. Now it becomes necessary, as I began by saying, if this committee is to be of any service, if it is to be continued—that public opinion must be educated—well, I don't know as to that, for the public is already pretty well satisfied that the matter of our government is not handled well, but that an expression of this opinion be given. Now, there are three hundred members of the Western Association and two hundred and fifty of the American Institute. If all of these would manage to influence those within their immediate reach—all the business men and prominent citizens within their reach—and induce them to use their influence to bring about a reform in government buildings; if they will endeavor to enlist the editors of the great political journals; and the editors of the weekly papers and the monthly periodicals, and induce them to call attention to the need of a change in the present methods of the government in the construction of its public buildings, you will find that the

congressmen in the inmost recesses of the back woods will come to think there is something in the sentiment that demands a reform. Then the labor of the committee can bear fruit. But until this is done, it never will, and I offer the resolution that the Committee on Procuring a Reform in the Architectural Practice of the Government of the United States be continued. I wish to say, let no one vote for it who will not make up his mind he will not forget it after he has left this convention; that, realizing the necessity for work, he will give his personal attention to it from the time he leaves this room until the next convention; will not leave a stone unturned nor an opportunity to escape to refer to it, and urge it upon the consideration of everyone, from the most influential citizen down to a member of congress. With these remarks, I hereby move the retention of this committee—with this request—don't vote for it if you are not prepared to work with the committee.

Mr. Patton: Mr. President, I would like to second Mr. Adler's motion, and in doing so, I wish to give a little personal testimony. For several years I was employed in the office of the supervising architect, and while there I was convinced of one fact—no man who works in that office can do as good work as he can outside. He must always wait upon some high official to do something, and there is no draftsman in the building that has any authority to give directions, information or advice as there is in outside offices. From my experience and observation of the methods of doing work in the supervising architect's office, I do not believe it is possible to do good work under the present system, no matter what the personnel of the office might be. I might state one little affair as an illustration of how things are done there. I was put in charge of an addition to one of the government buildings. A communication was received at the office from the postmaster of the place where it was to be built, saying, when we were ready to go on he would come down to Washington and see about it, and consult over it. I suggested that I should go down there and take measurements, and see what was wanted. "Well," was the reply, "what good? Mr. Patton, would it do for you to go to that place? You would have no authority," and so the matter was dropped. Now, in an outside office where there are three or four draftsmen, it is common to say to one or the other of them, "Mr. So-and-so, go to such a place and find what is wanted and take the measurements," etc., and he comes back well informed, and ready to work understandingly. I therefore say under the methods of the supervising architect it is not possible to get the best results. We have Mr. Schweinfurth here who was in that office longer than myself. I think it would be interesting to hear from him.

C. F. Schweinfurth: After listening to such an eloquent address, I would rather be excused.

Mr. Yost: I would like to make some inquiries in reference to this proposed bill. I want to ask the committee a question in regard to a statement made to me by a member of congress to this effect. He said: "What good are you going to do suppose you change it? It costs the government now very much less than you want for your services—that the figures show it is less than five per cent." Now, I want to know if anyone here knows whether this is true or not?

Mr. Adler: I wish to say it would not make any difference if every employé tendered his services gratuitously. I believe the government can better afford to employ the best talent in this country than to retain the class of men it does now in control of its architecture. I think it is a matter of comparative indifference whether it is cheaper or not. The question is one of results—whether the government buildings are enough better adapted to the peculiar site of each particular place—whether the best methods of construction are used—in short, whether the greatest amount of results for the least possible outlay is obtained. If this is attained, the government can well afford a larger sum for architectural services than it pays now. Supplementing what Mr. Patton has stated, your committee made two visits to Washington, and at both times saw a good deal of the work of the supervising architect's office. As far as it was possible to observe, the head of the office was employed entirely with administrative work. If he was able to give any attention to the design of a building, it was a limited snatch from his more important duties. The personnel of the employés were reasonably good office men, capable of producing thoroughly good work when controlled by a master mind, but a master mind cannot be purchased for \$4,500 a year.

Mr. Yost: Mr. President, in that regard I agree with Mr. Adler, that the government can better afford to pay for good plans than to get its work on indifferent ones for nothing; but what we want to know is whether the committee made any inquiry in regard to the cost to the government under the present system? This gentleman of whom I spoke was candid enough to say, that unless it can be shown to members of congress that there would be no loss of political influence by the administrative change, and that they could get control of a few draftsmen, the influence of local supervising architects, and all that kind of thing, in a word, put to them as a political measure their coöperation could not be looked for.

Mr. Carlin: In regard to Mr. Yost's question I would say, since I have been a resident of Buffalo there was an addition made to a government building which cost \$100,000. There was a question came up of a change in the plans which incurred an expense of \$1,300, not one cent of which was charged to the expense of the supervising architect at Washington, but was included in the cost of the building.

Mr. Adler: I really am ashamed when I think of it. The matter was brought up by a member of the committee on public buildings, a Mr. Krouse of the Forty-ninth Congress. He was a gentleman from North Carolina—from the turpentine region. He wanted to know if the conditions of our bill prevailed, if each government building would not be competitive, to be participated in by architects all over the country, and if the work would not go to the great architects of the large cities, those who had experience in handling big fireproof buildings, and if the local architects would not be left out in the cold. He added: "You know we cannot go back on our constituents. We have architects of our own, and on a competitive basis they wouldn't have a chance. We don't like this thing. We think it is a move got up by a number of big architects in the big cities who want to gobble up these." I told him if the competitions were

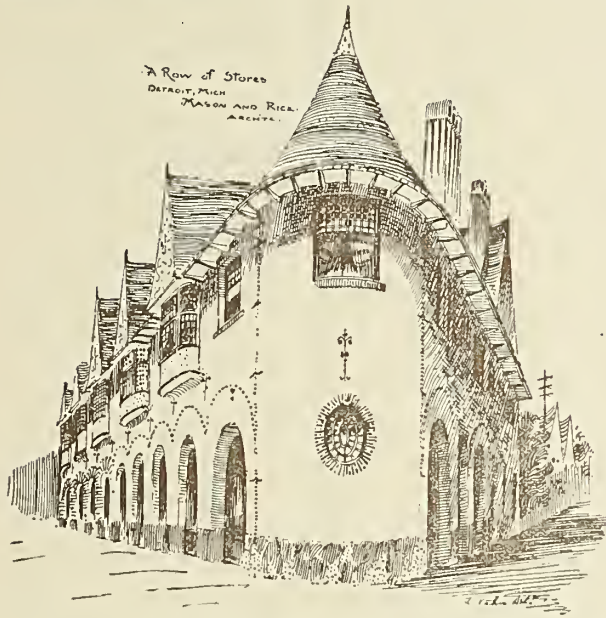


honestly conducted it would result in the government getting better work, and if they were not so conducted, it was easy enough to conduct them so that the figures of the local architects would be pretty sure to get them the work.

Mr. Hellmers: Mr. President, in order to complete this matter Mr. Yost brought up—the matter of political preferment—I will mention that I unfortunately was in the employ of the government, and just previous to the election I was politely informed by the campaign committee that a certain per cent of our fees would be very acceptable by a certain day.

Mr. Yost: I want to say in regard to the cost I do not believe the government pays less for its plans and construction by the present arrangement, as is alleged, and I think the continuing of this committee eminently proper.

The Chair: I never had a doubt but it costs the government a larger sum than five per cent.



A member: Mr. President, the cost of a government building is a matter of a great deal of importance at the present day, not only to the government but the people of the United States. The cost of the plans and details are a small matter in the cost of the work of preparation of getting ready to put up a building. The preparation of the plans is one thing and the appointment of a local superintendent to carry out the plans is another. And where the plans are wrong and wholly incompetent for the work and have to be sent back and made over again is another means of expense. In illustration: I happen to have knowledge of a work going on at Kansas City for a year or two. The plans were sent on to the local superintendent there who happened to be a man of considerable ability, and known, perhaps, to all of you here, as he is throughout the East and the West for his fitness in this direction—his ability being beyond question. He has been in the employ of the supervising architect ever since he was a young man and he will compare with any of the old heads in the hall today. I said they had prepared the plans and sent them on to him and when he had examined them he wrote a letter to the supervising architect, saying: "Your plans are wholly insufficient for this construction; your work will not stand." What was the result? A reply, saying: "You attend to your business and we will attend to our business." But that was after some five or six weeks had elapsed. The work was commenced. The foundations were built. The substructure built. The superstructure built up to the doors. What was the result? Nearly the whole they had built had to be taken down. The outer walls, piers put in and new foundations. Now which would have been the cheapest—to employ a competent man at his price or to continue a policy that cost the government, in this instance, \$50,000 to tear down the inefficient work and build it up again? This instance, and not an uncommon one in the matter of government work, will serve to show the necessity for a change. I think that some definite action should be taken; that some general information should be given to each architect throughout the United States, so that in trying to exert their influence with congressmen, they could talk to the same point, and in that way be more likely to induce them to work for the good of the country and the interest of the people. I think this instruction should come from this body. Now, if we get up some instructions, some kind of a letter that will enable us to work on the same line with our congressmen, we will know what to do.

Mr. Adler: With that matter in view, I beg leave to offer the following as an addition to the resolution I first offered:

Resolved, That the Committee on Reform of Architectural Practice of the United States Government be continued, and that the secretary be, and is hereby, instructed to send to every member of this association a circular letter, asking for specific information as to special instances of inefficiency of the work in the supervising architect's office that has come under his notice (amended by Mr. Hellmers, to include the work of local superintendents on buildings under construction).

On being put to vote, having been duly seconded, the resolution prevailed.

Mr. Adler: Before proceeding to another subject, I wish to say on behalf of the members of both committees, that of the Western Association and the Institute, who were with me at Washington, that we did not mean by our expression of opposition with the system in vogue for handling the government building, to cast any slur upon the present incumbent of the

supervising architect's office. We found considerable ability among those serving in the positions. We left Washington with the conviction that if Mr. Pierson was not doing the best that could be done, it was owing to the limitations under which he was laboring, and for which he should not be held personally responsible. We found him also a victim of an extreme desire to determine how economically he could manage that office by reducing the drawings of the buildings to a very small scale, and by other similar means, and upon inquiry into that particular, we found he thought he was merely carrying out the desire of the administration to see how much cheaper it could be conducted under a democratic than under a republican administration. The result was, the character of many of the drawings sent out of the office were not what you would have provided for buildings under his care. I now reiterate that we, as a committee, left Mr. Pierson with the feeling that he was doing the very best he could under the circumstances.

Mr. Yost: Mr. President, I think in this discussion it was not meant by anyone to reflect on anyone connected with that office; that it was meant to be entirely impersonal.

The Chair: There is one other subject you can take up for discussion this evening—the report on statistics of competitions. However, I think Mr. Illsley prefers that it should be left over until tomorrow morning.

Mr. Adler: As nothing further can be done now, would it not be well to take up the report of the Committee on Consolidation. It is now but 20 minutes to 5 o'clock. I move that the order of business be suspended as laid down under the programme, and the report of the Committee on the Consolidation of the Architectural Associations be now taken up.

On being put to vote, the motion prevailed.

The Chair: We will now take up the important subject of the consolidation.

Mr. Adler: Mr. Chairman, your Committee on Consolidation started out with the idea that what was required of them was to evolve, if possible, a practical plan of consolidation, or what would really unite the several architectural associations. Your committee understood fully in order to do that it would be necessary to make some concessions to other associations in order that the new consolidated organization when formed would not necessarily be merely an enlargement of the Western Association, that any programme of consolidation that implied anything more than an enlargement of the Western Association would meet with such opposition of the American Institute and such other organizations as might be found that it would defeat our object. We thought also that as the consolidation had been first proposed by the American Institute, a certain amount of deference to the Institute was but proper. We thought, further, that the American Institute had been the pioneer architectural organization of the United States, that it had done all the preliminary work. It had made great efforts—many of them successful—in raising the standard of the profession, and establishing legal and professional charges, which are still the ruling ones throughout the United States and throughout the greater part of continental Europe. The committee also, in recognition of its schedule of charges being impleaded in many records of the courts of the country in which the Institute, as such, is mentioned by name, and that it has been given as authority in building letters, and in the building laws of the country—for these and many other reasons—thought it wise to propose that the name of the consolidated organization should be the American Institute of Architects. Your committee hopes that when this matter is brought to passage you will all agree that your committee has acted wisely in coming to this conclusion. Apart from this no definite action has been had by your committee. It had a correspondence for seven or eight months with Mr. A. J. Bloor, the secretary of the American Institute, who prepared the paper which provided the scheme for consolidation, and which was explained by him to the Committee of the American Institute, and which was adopted at the last convention of the Institute. The salient point of this report was that the architectural associations of the country be united with the standard of admission to membership of the association so formed based upon that of the Western Association, which is simply that of the American Institute with some more stringent and definite rules, which sets an honorable practice. Upon one point the committee of the American Institute and the committee of the Western Association have been at variance. You all know that in the American Institute there are two degrees of membership. There is the degree of membership which is called the "Associate," and there is a higher degree of membership which they call "Fellow." We think that the Western Architects are all equally fellows, and we proposed that all come into the new organization on an equal footing. This was opposed in the Institute. It was held there should be two degrees of membership. It is the desire of the American Institute that its two degrees be retained in the new organization. That when a young man, who is comparatively unknown, wishes to join he should be required to take a provisional degree from which, later on, he can be admitted to the higher degree of fellowship. That in the first formation of the new organization, the American Institute having in the neighborhood of one hundred and fifty fellows, the Western Association should be compelled to elect one hundred and fifty of its members to the new organization as fellows, and the remainder of its some three hundred members should be received only as associates. We, with all the Western Association, are opposed to this. We believe we can't very well make a distinction in the degree of membership. We think that all should come into the new organization on an equal footing without more or less distinction from higher to lower. We think that the personal standing of an architect does not depend upon whether he writes F. A. I. A. after his name or not, but that it depends entirely upon the volume of work he does and the quality of that work, and upon his general conduct. The architect who does work which calls public attention to him leads in the community in which he lives—that man who is capable of doing a high grade of work, and doing it well, will be highly esteemed no matter whether he is an associate or a fellow. That architect who, through misfortune or incapacity, does but little work, and does it illy, will occupy a lower standard no matter whether he is an

associate or fellow. In short, it is an artificial distinction which proposes to give a man a higher or lower standard than he otherwise should have. I believe we have in this city and in New York, members of the Institute, architects occupying the degree of associate, who in general information of the practice of the profession are better qualified and are more esteemed by those among whom they live than many who are able to call themselves fellows. The rank of the architect is so changeable that a man who today may occupy a very high position and can get the best result, which we hoped to have seen increased and which would have lifted him to a high eminence, maybe through a combination of circumstances which we could not foresee, has not been able to fulfill the high hopes we had for him. If we leave the professional position to the public we can't make the mistake as to his professional standing. But your committee trusts that a discussion of this part of the problem before this convention will be to instruct this committee in formulating the plan of the new architectural association that it must be on the basis of the equality of the members of the association. (Cheers.) There is in that connection, and perhaps in view of what was foreshadowed in the recent action of the newly appointed committee of the American Institute, a plan for the formation of a higher degree of membership which applies only to a selected number who are to be honored by this highest distinction. It is to this effect: There will be formed out of the American Institute of Architects a body to be called the Administrative Council, which shall be composed of members of the Institute who have had at least twenty years practice as architects, and to which the ex-presidents of the Institute, after they shall have got out of the office, shall become *ex-officio* members of this council. This council shall have fifteen members elected the first year, and at each subsequent year five more, until the number of thirty is reached, when after that no more shall be added to it by election only by reason of a vacancy occurring by the death of members. The object of this council besides conferring especial distinction on a few highly honored members is also that of their acting in the place of a disciplining committee. It is claimed that the members of this council will be so far removed as to be a disinterested and, consequently, a very just and honorable court of inquiry. It has been said by some that wherever work is to be done it must be done by individuals or by small committees; that matters of discipline referred to so large a committee as thirty will never receive attention by all of the thirty, but that someone else will have to do the work, and by such a course but little could be accomplished. The only reason for adopting this part of the recommendation of the American Institute of Architects would be in case some such action would be necessary to secure the support of the American Institute; that is, we would rather encumber the new organization with what we consider a superfluous clause in its constitution than to see the entire scheme of consolidation fall to the ground. Mr. Stone, of the committee of the American Institute, is with us, and I think perhaps we would all like to hear what he has to say to us on this matter of consolidation.



Alfred J. Stone: Mr. Chairman and gentlemen, I am very glad to represent the committee of the American Institute of Architects on this floor. In regard to this matter of consolidation of the Western Association of Architects with the American Institute of Architects, I think I voice the Institute. In fact I know I do that of the committee. I hope the result will be accomplished. I am glad to see the members of the committee of the Western Association so ready to join in the adoption of the name of

the American Institute of Architects. I think the reasons stated by Mr. Adler are sound in taking the proud name of our Institute, which has in so many instances been recognized by the various courts, both local and national, and it seems to me to be fitting that the new organization should be accomplished under that honorable name. In regard to the question of grades of membership, which appears to be the chief difficulty that lies in the way, in the Western Association you are all of one accord as to the making of any portion of your association associates and a large number fellows. It may seem to you an artificial distinction. Those who may receive the Fellowship might think it all right, but those who are to remain associates might think otherwise. Certainly, I do not think that to omit these distinctions will meet the approbation of the American Institute — to have all become associates in the consolidation. If we do not adopt a plan to have two grades of membership, it seems to me we must elevate all to fellowships. Of course, if this convention thinks best to instruct its committee to that effect — to have nothing to do with any gradation of members — I am ready and willing to leave, as far as possible, the question of details to the action of the joint committees, who may give it a more careful discussion than they can have at this time with the members of this convention. I do not wish to exert any influence with the convention in this direction. In the matter of the council there are one or two reasons for the introduction of that class of members. It has been felt with this convention, and also in the convention of the American Institute of Architects, that a repetition in office should not be the rule hereafter — that men should not be returned to office from year to year until they become to be looked upon as personal fixtures, but we should annually elect a new president in order that we may avoid such disgusting pictures of personality. Some of us have gone so far as to make a change of all the officers, even the secretary. It was proposed in our convention that

the board of trustees, which is composed of twelve members, should be chosen so that four should be elected for three years; four for two years, and four for one year, so that this board might be subject to the same rule of change as the president. If, then, we should adopt this plan for the election of president and other officers, it was thought it would be well to select this class of members as a council, to whom all matters of discipline could be referred, and they would be so far removed from the governing power of the Institute as not to excite any cause for jealousy from their decisions. It was also a part of this plan that any matters that came before them should not come before the convention for discussion, but that access could be had to the evidence that came before them, and in this way we could avoid washing our dirty linen in public. All we should have to do would be to vote yea and nay on their report when brought before the convention. Thus would all matters of discipline be referred to a committee, who would have charge of all minor details, and only the result of their work would come up for public action, which would save the convention much valuable time. I trust we shall all vote for consolidation, for I believe it is for the best interests of the profession that we should all be under one body. This would not or should not prevent any local meetings. It would not and could not restrict any body of architects from holding their gatherings as now, but would add strength to every local body.

Mr. Hellmers: I would like to ask, for information, if the gentleman will kindly state what is the exact standing of an associate and fellowship in the American Institute of Architects?

Mr. Stone here read from the constitution of that society the sections relating to memberships.

Mr. Sullivan: It is with exceeding regret that I feel myself constrained to differ with the American Institute of Architects in this matter when it comes to the consolidation of the two associations. I have given the subject considerable thought, and I am deeply impressed that it is a scheme that is fraught with danger. In the present condition of architectural growth there should be an absolute democratic condition. No man should be placed above his fellows any more than his own individuality will place him. I think instead of two classes we might better make it two bodies, which would increase the most in time I have no doubt in my own mind. I believe that a favored or special class is dangerous to any party, or government, or country. I think the members of the Western Association feel as deeply as I do in this matter of making fictitious classes or grades in the profession. For my own part I do not believe it appeals to the sober convictions of this convention. I think a man can do better work when he feels that he is an equal with others who claim no higher standing by reason of some official action. The promotion of two classes. I truly desire this consolidation, but I feel that the proposition to effect two grades of membership is insurmountable to the uniting of the two bodies if it is to remain. It is in my mind whether it is better for the Western Association to enter into such an alliance or to remain a distinct organization, as now.

Mr. Hellmers: The reason I asked Mr. Stone the question I did is that I understood an associate member did not have a voice in the proceedings.

Mr. Adler: That distinction was removed at the last convention held at Buffalo.

Mr. Clay: I thought the distinction was in the amount of money they were able to pay.

Mr. Adler: Even that distinction was removed.

Mr. Clay: It seems to me that the fellows and associates of the American Institute are very nearly on a level. I think this organization would do a great injustice to this question of the American Institute if they allow any distinction to be made hereafter. I came here with my inclination toward the Institute's plan, but I am thoroughly won over to the other side. I happen to be a fellow of the Institute and one of its executive board, and I feel Mr. Sullivan's position is correct. I think if Mr. Stone does not agree with me now he will come to agree with us yet. I really feel as though this organization should make a strong point not to join with the American Institute unless this one thing is given up, and I think that will have a tendency to bring the American Institute to terms. I do not mean to put it in that way, exactly. It might be well to have all members enter the new organization on the same terms as any new member. I do not know whether that would be proper or not, but something of the kind should be done in entering the new organization, as by such means we might rid ourselves of certain parties that are not all we ask for. If there is any distinction it should be made on this basis, no matter whether a member of the American Institute or the Western Association. They should be admitted under the same requirements that are now exacted by the Western Association for new members. If this could be done we should get rid of some members the Western Association has taken in. But Mr. Stone says this class will die out and the new ones be all right.

Mr. Stone: Mr. Clay suggests that when we become members of the new organization we should all become new ones. I hardly think the consolidation can be brought about in that way. I speak my own individual feelings and also, I have no doubt, those of my fellow members. For my own part, I can see from the feelings here what your disposition is, and I should hardly think it was necessary to instruct your committee. We shall meet them on our part to bring about a consolidation.

Mr. Adler: Mr. Chairman, I would like to make an inquiry of the gentlemen of the press in regard to getting a report of today's proceedings tomorrow morning.

The Chair: You see Mr. McLean and make the arrangements with him, as he has the only stenographer here.

Mr. Adler: I move the president of this Association be empowered to make the necessary arrangements for printing the report of this day's proceedings for distribution among the members tomorrow morning.

The motion prevailed.

On motion, the convention adjourned until 10:30 o'clock A.M. November 22.

SECOND DAY—MORNING SESSION.



The convention was called to order at 10:30, President Smith in the chair.

The Chair: Gentlemen, you will please come to order. The discussion on consolidation will now be continued. I might mention there are two reports not yet made; that on legal decisions and the report of the Committee on State Associations. Mr. Hellmers is chairman of the Committee on Legal Decisions. Perhaps we had better hear these reports now.

Charles E. Hellmers read the following report of the Committee to Collect Legal Decisions relating to Building Interests.

REPORT OF COMMITTEE UPON LEGAL DECISIONS.

Your Committee for Collecting Legal Decisions relating to Business Interests has the honor to make the following report:

In addition to the reports received last year on the same subject, further ones from the State of Illinois, of which Mr. Fred Baumann is chairman of the sub-committee, and from the State of Michigan, sent by Messrs. Donaldson and Meier, of Detroit, came to hand.

The work of this committee has been done in the most complete manner and placed in serviceable shape to each and every member of the association through the labors of Loyd, of Baltimore, who has compiled a valuable volume which, as one of the members of the committee (Mrs. Louise Bethune) writes: "gives a hand-point and clear model for future work," and which it is to be hoped will aid in removing the indefiniteness of the committee members' ideas on the subject, which was the greatest obstacle in getting serviceable work from them.

One or two applications for information have been received by the chairman and answered as far as the limited material at hand would allow. The few who tried to make proper use of the information in the hands of the committee, while unfortunate, perhaps, in not getting much assistance individually in the effort, have clearly demonstrated what the value of a central bureau of information would be. At present, lawyers, even the very best of them, are very uncertain and poorly posted in regard to decisions on this subject. They advise clients to undertake litigations, which had the important points been carried up to the higher courts and precedents been established, would have never been begun.

Cases containing points in relation to the contracts, building and party rights are of equal and often more importance to the architects than even such as appertain directly to the relation of architect and client. How many good and serviceable hours have all of us spent in court rooms while a couple of lawyers who knew little, a judge who knew less, and a jury that knew nothing about the relative claims of the contestants, or the many complications connected with the erection of a building, were endeavoring to settle some trivial misunderstanding, which the architect, if backed by proper precedents could have adjusted to better advantage alone.

The conditions of the lien laws of the different states cause many complications and any effort tending to make them more uniform and simple would be of great value.

With the idea of keeping the little progress made so far, as a point to gather around, continuously, more valuable matter, your committee would respectfully recommend:

- 1st. That a committee of one, with power to appoint, be continued.
- 2d. That a small fund, for collecting and placing in proper form important material, as well as the purchase of books of value to the association, be allowed the committee, all expenditures, however, to be approved by the executive board.

The Chair: The report of the committee will be placed on file, to be taken up in its order. The report of the Committee on State Organizations is now in order.

J. F. Alexander, chairman of the Committee to Organize State Associations, submitted the following:

REPORT OF COMMITTEE ON STATE ORGANIZATIONS.

To the Western Association of Architects, in Convention assembled:

Your Committee on Organization of State Associations beg leave to report that the year of 1888 is less prosperous than the year preceding it, for the reason that we organized seven state associations in 1887, which covered most of our available territory.

We have successful working associations in all the states in which we have more than one member, except Georgia and Indiana. We have received substantial encouragement from California, Old Virginia, West Virginia, Arkansas, Georgia and Florida. With the present promising outlook, we hope to be able to report successful organizations in all of the last named states at your convention in 1889.

We find but little coöperation in our works in states where we have but few members, on account of the pending consolidation of the two great American associations of architects. Should such consolidation take place, doubtless material changes in the status of our state membership would take place, which has led many architects throughout the West to await the result of the pending consolidation.

Respectfully submitted,

J. F. ALEXANDER, A. C. BRUCE,
H. P. McDONALD, JOHN SUTCLIFF,
J. G. HASKELL, E. W. WELLS.

The Chair: The report will be received and placed on file for further consideration at the proper time. The further discussion on the consolidation of the architectural associations of the United States will now be continued from last evening. I will state for the information of members who were not present yesterday that the question before the house is on the adoption of the report of the committee. The report is being printed, and will be here in a very short time.

Mr. Sullivan: I move that we suspend the order of business, and take up one of the other reports for discussion.

Mr. Illsley: Mr. President, in regard to the report of the Committee on Statutory Revision, the first paragraph states that the work of the committee was entirely suspended during the year, owing to the presidential campaign. I will make a motion that this committee be continued, and

made an expounding committee. I think we will require its services for an indefinite length of time.

The Chair: I think it has already been continued.

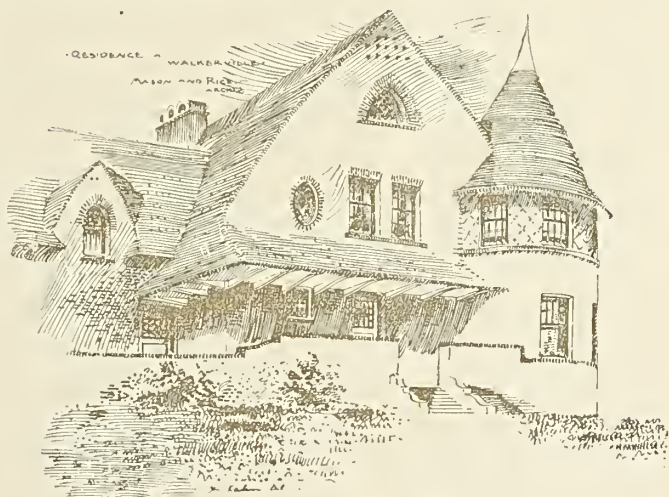
Mr. Sullivan: I think the committee asked that it be discontinued unless the members back it.

Mr. Adler: I will say in reference to Mr. Illsley's motion that its passage will be of little or no value to the association unless every member coöperates with the committee. It is absurd for a little delegation to go to a state capital and present to a committee of the legislature there a bill for the regulation of professional practice, when in that entire legislature there is not one who ever heard of that bill; who never heard one of his constituents—never heard any paper in his district or state—recommend the passage of that bill. Our legislators never consider a matter that is not urged upon them by their constituents. They'll pay but little attention to a little committee of architects who come with a bill from their professional association. I have made a couple of expeditions of that kind. We found when we arrived at the capital they did not know anything of the state association; they just knew, barely, that it was an association of architects, and looked upon the asked-for legislation as they do on some other trades union measure—something to enable architects to earn a little more money—and they paid no attention to us; and it was right. While it seems wrong to abolish this committee, yet, I think we might as well abandon it, unless you all help. I don't know; I leave that to others to determine what would be the best means to procure a general coöperation among the architects at large which the committee must have before it can accomplish any good. I hope some of you will be able to propose something to this end. I simply say, we must have coöperation.

Mr. Sullivan: Mr. President, I think we cannot dispense with this committee. The work to be done by each state association will need the aid of the committee for consultation and counsel, and, if it will not be putting too much work on the committee, to desire it to correspond with the state associations with this in view. In that way we can progress.

Mr. Carlin: I agree with Mr. Sullivan as far as he goes. I think it will be well to attempt a scheme of this kind, but we are not yet of one mind. Why not give it more consultation and develop a scheme; map out how this licensing ought to be, and educate the profession that all may think alike? Why can't the committee of the Western Association evolve a scheme to educate state associations to the same line of thought on this question?

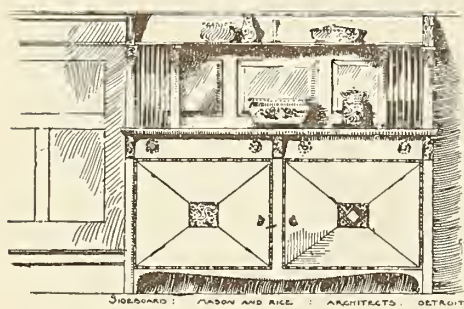
Mr. Adler: At the St. Louis convention a very elaborate report on this subject was presented in which a scheme was mapped out, and it was adopted with great enthusiasm. The author of that report explained his mode of procedure. On the crest of this enthusiastic throe, the president charged the members of the association to be united, and work for the success of the scheme. After the convention the enthusiasm all died out. Nobody took any interest in the matter. When it became necessary, in this city, to give it an illustration but three of the committee could be found, and when it became necessary to call a second time, I think only one could be found, showing the very little interest there was felt in the matter, and that is what we must have to succeed.



Mr. Yost: Mr. Chairman, I have had some experience in trying to carry out this measure—in my state association and with state legislators, I was present at our Ohio legislature, where it was presented for consideration, and I have had considerable talk with most of the influential members regarding it. In its present form there seems to be a constitutional limitation for a part of it; they say we would have to wait some years before we can have it carried out. While some professions have had carried through similar legislation, such as druggists, physicians and attorneys, they do not seem to realize a fixed profession for an architect. They say the public would be very much opposed to a bill which would want to make a man who wanted to build his own building go to an architect for his plans and specifications. An act could be framed which would meet with favor, one that would apply to public buildings upon which public money is expended, but just as you ask for one that would favor architects it stirs up opposition and they say we won't have anything to do with that. If it is done at all it will have to be brought about under a different name, for the present, until such times as one of the now influential men in the legislature hopes to see all the constitutional objections removed. At the same time I have prepared a bill to submit, and it is now in the hands of some of the members of our legislature, with a view of controlling it somewhat wherever public moneys are to be expended, and we hope to have the building laws in such shape as to include all public buildings, even

where private money is expended, such as theaters, churches, halls and all buildings used for public gatherings. We expect to get this act before our legislature, and control that part of the building work.

The Chair: As one of the members of that committee appointed at St. Louis, I endeavored at the succeeding legislature to get the bill before the house. I carried the bill there just as it was formulated by the convention. The only real difficulty in getting that bill before the house and rushing it through was—money! (Laughter.) I have no hesitancy in saying had I had a good long purse I could have carried that bill through the house. There were several members of that legislature that had some little common sense, and they could see the advantages that would arise from passing that bill. One of the points raised by one of the legislators who had spoken to me on the subject was: "You cannot get a bill passed unless it means to cost the state nothing—that the fees for examination would be sufficient to pay the Board of Examiners." To ask the state to pay the examining board will certainly be the death of that bill. But on the coming legislature I am willing to make one more endeavor, and something may then be done, I hope, to carry it through.



Mr. Forbush: Mr. President, I was at Columbus on architectural business and while there I talked with a number of the legislators in regard to the bill for licensing architects. I found they thought it was a scheme by which architects sought to cut out the country carpenters from constructing such small buildings as they are

in the habit of constructing and deprive them of their rights. I also found this bill might be revised so as to apply to cities of a certain class, or to buildings of a certain cost. I propose to be in Columbus this winter and if this committee is not discontinued I will be pleased to give them any information I can.

Mr. Clay: I am sure Mr. Adler did not cover this ground, I was with him at Springfield, and in our talks with the members this question of the carpenters was raised. Our committee admitted the point and got over it in this way: It should be agreed that persons practicing architecture and building should be privileged to do so, that is, a person can make a contract and also fix the plan without a license, but a person not a practical builder, a person who follows architecture as a business should be compelled to have a license. These I thought were the best terms we could make with the legislature. It is what I tried to do unsuccessfully at Springfield but I don't see why we cannot keep pressing at it until we get something out of it. Of the argument that architects should be compelled to have their licenses I think no effort whatever should be made to compel an architect. I don't think we should try to do that. I think a person can be his own architect just as he can be his own physician or his own lawyer. But if a person does employ an architect that architect should be a responsible one, and the very fact that he put out the sign, "Practicing Architect," he should have a license, and that guarantees he is proficient the same as the druggist, physician, dentist and attorney. But if persons do their own work that is all right; let them prescribe their medicine and take it.

Mr. Carlin: Can a line be drawn between the architect and the builder, between those who should get the license and those who should not? If we require those who make the plans to be licensed, what of those who get the work and have someone make the plans to get the job?

The Chair: I think that is provided for in the bill of the committee.

Mr. Adler: No it is not. I am sorry I haven't a copy of the bill. The bill provided that none be permitted to act as an architect until he was examined by a state board and demonstrated his ability to perform the duties of an architect. The bill we had drawn would not have prevented the carpenter, or the tailor, or the shoemaker, from practicing architecture, provided he could pass the examination of the state board, and showed his ability to practice it, and I think the strength of the bill lies in the right of anyone to practice architecture but it is made a *sine qua non* that a person planning for the erection of a building must demonstrate he is possessed of sufficient knowledge, and I think that the members of this association take that view. They don't ask to be exempt from the exactions of this bill. They don't ask to have anyone excused who can not demonstrate his ability to perform the functions of an architect and this I think will strengthen their position. I think there is a misapprehension right here. I think there is a feeling abroad, brought about by careless talk, that the primary intention on the part of the movers in this matter, is to make it a little easier for us to get big fees out of the public. That may affect the passage of the measure but it doesn't seem to. The fact that an apothecary, an attorney, a physician or a dentist has to pass an examination does not put the practice of medicine, dentistry or law in the hands of a favored few. I think in all of these professions or callings people earn large fees, but there are some who hardly earn a living. It will be so in architecture. We do not ask the legislature to be intrusted with a monopoly. What we ask is, that the building public shall be protected from incompetent architects, who endanger the health and lives of citizens, just as the state protects them from incompetent physicians, druggists and dentists, and insists that an attorney must know something of law. Now there is nothing in this bill which, if passed in the various states, would give any one of the members of this association any advantage over the least member in the profession, for this bill makes it incumbent on everyone to demonstrate before an examining board his ability to perform the duties of an architect before he can offer his services to the public. Therefore the proposed legislation we ask for in the various

states is not of private interest but of public interest, and it is upon this ground we must urge the passage of the bill.

Mr. Carlin: Mr. President, I have been unfortunate. I have never seen a copy of this bill. I would like to inquire if there is a copy of it here?

Mr. Adler: I have a copy of it in my office, and will bring it here at the afternoon session if I can find time. If not I will bring it tomorrow morning.

The Chair: What is your will with the report of the committee?

Mr. Illsley: I move the report be accepted and the committee be continued.

The Chair: I will read the names of this committee. Dankmar Adler (chairman), Chicago; Geo. L. Fisher, Omaha; F. G. Corser, Minneapolis; E. H. Taylor, Cedar Rapids, Iowa; E. O. Fallis, Toledo; Albert Cobby, Yankton; Chas. K. Ramsey, St. Louis; John M. Donaldson, Detroit; C. A. Curtin, Louisville; Geo. B. Ferry, Milwaukee; Jas. F. Alexander, LaFayette, Ind.

Mr. Ellis: Mr. President, if I may be allowed to say a word, I would suggest an amendment to the committee. I do this simply because I believe it to be for the advantage of the profession and members at large, and especially of those in the West. I would suggest to discontinue the name of Mr. Fisher and replace it with Sidney Smith.

The Chair: Do you move that as an amendment, Mr. Ellis?

Mr. Ellis: I would if it were legal. I believe there is a point there as to whether it can be done.

Mr. Root: It is out of order. I understand Mr. Ellis suggests this committee be continued with this modification.

Mr. Adler: I believe it has been the practice for a number of years for the incoming president to appoint these committees. It is not understood that standing committees should be changed from year to year. This large committee should be changed. The convention does not always get from a standing committee its expectations, for frequently gentlemen are appointed on it that won't do any work. If Mr. Ellis will make his motion to be understood in the sense that the committee be continued, and that its membership should be appointed by the incoming president.

The Chair: I might say I was responsible for making that change in the committee at the last convention, as I was a member of it up to that time. I substituted Mr. Fisher for myself.

Gentlemen, you have heard the motion, with the modifications suggested, what is your pleasure?

The motion, seconded, was carried on being put to vote.

The Chair: Having disposed of that report, the report of the Committee on Consolidation is now in your hands. We will renew the discussion on that report.

Mr. Adler: Mr. President, I take it for granted that the discussion called up yesterday by the report of your Committee on Consolidation, and the desire to have it continued now, is not so much to make a propaganda, but rather for the purpose of calling out the opinion of members as to matters of detail of this consolidation. I will deviate to this extent from what I said yesterday. I said yesterday that I wanted instructions on certain points. I will withdraw that, seeing the committees interested is not to be cumbered with instructions, but rather to have a full expression of opinion from the members of the association as far as possible, so that it may go to the conference with the American Institute committee with what the Western Association desire. We were discussing yesterday the advisability, in the new organization, the continuing of the associate and fellowship, and it was evident from the discussion and the applause received that it is nearly the unanimous sentiment of the Western Association. In the new association we will enter it upon a footing of equality. There was another point brought up yesterday. I do not know that you are ready for it now; that was the establishment of a council, to be composed of architects who had practiced a certain number of years, to be inserted in the constitution and by-laws; to be composed of these and ex-presidents of the association as *ex-officio* members; the number of the council never to exceed thirty; fifteen to be elected the first year, and after that five each year until the complement is filled, when there will be no more vacancies except occasioned by death. The discussion yesterday was informal, and, I think, we might make this an informal one without any definite motion, so that when we rise to express our views we may do so unimpaired by any sense of responsibility we might feel in speaking to a definite motion.

Mr. Sullivan: Mr. President, I think this council idea is even worse than the idea of the fellowship distinction, and think we had better class them together. I think the government of an association should be in the hands of the live members of the association. I am not impressed with judging a man by the color of his hair; if gray hair will make a man wise, what will red hair make him? I think we should not differ on that point. I would like to inquire of the chairman of that committee if in the consultations with the committee of the American Institute whether any ideas were given as to the method for the disposal of property; how this association was to come into the new organization; if any special plan was proposed. In other words, I would like to hear as fully as possible the aims discussed by the two committees.

Mr. Adler: As to the aims of the Western Association and the American Institute they are the same. It was assumed that this newly formed institute would not take a wider or narrower scope. It was assumed that the membership of the new organization would be a home to the members of all architectural associations now in existence or hereafter to be called into existence—that had or that would establish as a standard of membership the honorable professional practice of architecture, and establish further, as a test of their an honorable and exclusive practice. We made the inquiry upon that point. The standard should be similar to that now existing with the Western Association. That is, they would require from each applicant: First, by his record in at least three pieces of executed work, the demonstration to come from the owners or occupants of the structures that his administrative abilities enable him to manage new interests. Second, that he should furnish photographs or drawings of these

same structures, and, further, the testimony of two members of the association testifying to the honorable standing of the applicant.

Mr. Sullivan: Do I understand that the new organization will put the members of the present organization to that test?

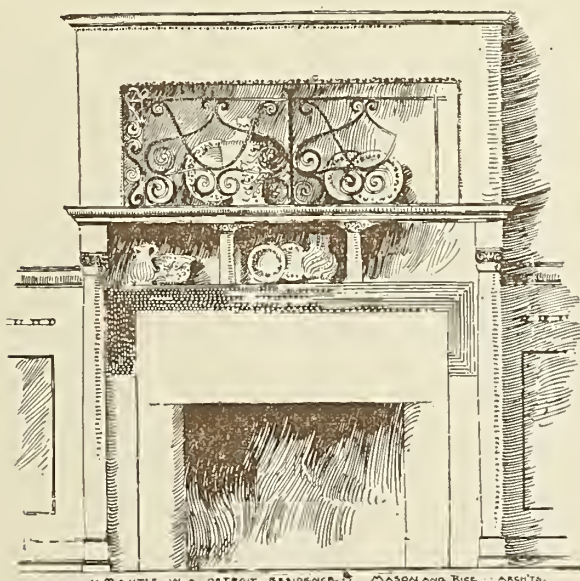
Mr. Adler: No; the secretary is to admit any member of any association whose standard of membership is as the American Institute, the honorable practice of the profession of architecture, and the Western Association, which went one step further and made it the exclusive practice of architecture.

Mr. Sullivan: Of those organizations there would be no question—no going behind the returns. The new association would have to assume that everyone who is now a member of the American Institute was in the honorable practice of architecture; and in the same way the members of the Western Association would have to be admitted. But of those who are admitted in the future, if this standard of the Western Association, and which has met with the quasi indorsement of the American Institute, is to prevail, then any from any other organization who may wish to come in hereafter must be tried by that standard.

Mr. Adler: There was a question presented by the committee of the Western Association—a matter of detail of the organization, which was proposed for the greater convenience of administration—that the new organization be divided into an Eastern and a Western department, each to hold its own convention, the joint convention to be omitted. But this met with so little favor by the committee of the Institute that it was withdrawn by your committee. Another question came up for discussion, raised by the committee of the American Institute—the making of the city of Washington the headquarters of the new organization. That the committee, after discussing the matter, decided to adopt, as far as that part of the clause, “that the city of Washington, the capital, be declared the official headquarters of the American Institute of Architects,” and in reference to holding the conventions there, except in cases where the president’s convenience would order it to be held in some other place. As to details and administration we haven’t got far enough in our discussion that much can be given. You may depend upon it, though, that the Committee on Consolidation of the Western Association will not consent to any scheme of consolidation that will not leave the new-formed Institute with full power to conduct matters to the welfare of the Institute in its own way.

Mr. Sullivan: There is one little point, while this matter of details is up, that it may be well for the committee to understand, that is to say: It is to be definitely understood by these two committees that when the new organization is formed, each of the old associations shall formally disband. I speak in this way for I think I detect in these proceedings a disposition for absorption; I feel the Western Association has either got to be gobbled up or the Institute; I think it a matter to be understood by both institutions, that they formally disband.

Mr. Adler: Mr. Burnham was the one who, in the convention of the American Institute of Architects, in 1887, proposed the consolidation of all the architectural associations in the United States, and it was in pursuance of his motion that the American Institute of Architects appointed a committee and called upon us to appoint a similar one to confer with them. A little matter of etiquette, arising from a little misunderstanding, for which, perhaps, I am as much responsible as anyone, has kept Mr. Burnham silent, but I feel he owes, if not to himself, certainly to his professional confreres, all of whom honor him very highly, that he express his views, which, no doubt, are well worth hearing.



D. H. Burnham: Gentlemen, this is what I hoped would not happen. Being on the Institute Committee on Consolidation, I feel myself bound by its views, and not at liberty to advocate here, what might seem opposed to them. I am, however, clear in regard to the matter; that the machinery of the final body should be simple as it can be made. If consolidation comes about, it should result in retaining the state associations and chapters, but the business of the institution at large should be conducted by a small body, elected for the purpose, meeting as often as necessary, and having power to settle all questions submitted to it. This body should have a central fixed place of meeting, to be determined in the future, and should have permanent quarters where all records may be kept, together

with the statues, busts and portraits of men whom the Institute desires to honor. I do not feel like saying anything in this general discussion in points wherein we differ.

F. M. Ellis: Mr. President, on the general subject of consolidation on the joining of these two associations in one, while I cannot see it, there may possibly be some reason to fear that the Institute may absorb the Association, yet I am decidedly in favor of the terms, which I think are in our favor. At the same time I cannot come to feel that if it were not so, we must say to the American Institute: “If you do not give up to our organization we will disappoint you.” Mr. Sullivan spoke of abandoning the old organizations. I want to say by the consolidation of the two organizations, in one sense they will be abandoned, but in a proper and truer sense they will be expanded and improved. It is union rather than abandonment; a kind—

Mr. Treat: A kind of wife?

Mr. Ellis: A kind of wife. We can all feel the same pride in the new organization as we would in the old organization. I am decidedly in favor of the scheme of consolidation. I am very much impressed with the idea of promotion in membership, to begin, if necessary, as junior, rising to associate and then to fellowship. Now, as to the joining of these societies I see no objection to adopting the name of American Institute of Architects, as recommended by this committee. If on coming together we find the constitution and by-laws adopted are not satisfactory, they can be altered. Every year we revise our constitution and we can do the same in the new organization. I cannot see how any member who is satisfied with the scheme of consolidation can seriously object to the scheme of the joint committee. We don’t need to lay out all the details now. The plan of this committee, I think, is a good one.

Mr. Burnham: I would like to say, I hope this convention will not instruct its committee. A little reflection will show everybody that no man can come to any definite conclusion today or tomorrow. I hope the convention, then, will not attempt to instruct them definitely on any of these points we have had under discussion. I believe this is the safest course to pursue. Certainly, if your committee is a competent one, you will be safe to leave all these details in their hands.

Mr. Root: I believe Mr. Burnham expresses the general feelings of the members of this association, but I cannot feel that the views of so large a body as this would go unheeded. Of course, the action of the committee has to be submitted to the Institute and Association, and approved by them. Yet, at the same time, large bodies coming together for legislation become cumbersome, and very often cloudy, whereas small bodies who have this class of business in hand, from the very nature of their concentration, seem to have more executive ability. I think the interests of both the Association and the Institute may be left safely with their committees.

Mr. Sullivan: As I understand the thing, the first idea is the consolidation. Second, on what basis, as members of this new organization, shall we come in? Then, again, shall the old organizations have to disband, or continue their existence? Mr. Yost seems to advance the idea that there can be a grand American Institute of Architects, and another American Institute of Architects at the same time. He seems to think it is to be a federation, and not a union.

Mr. Root: I understand that when we make this new organization, we make it a unit by amalgamation. I certainly trust the old organization, for the new one is to be the form of the consolidation.

Mr. Adler: I want to say a few words before we adjourn to lunch, with a view to the classification of members. It will not be possible for us to meet in joint convention without a definite, pre-arranged programme for the members of the American Institute and Western Association to meet a year hence to inaugurate the new Institute. It is the desire that we have a basis to work upon. The programme should be mapped out by the joint committee; that is, to a certain extent it is the work of the joint committee. Hence, it is the desire of the committee of the Western Association to have the members to touch upon every point they can think about of the policy of organization, so we can go, when we leave you, to the committee room thoroughly equipped with your views. With reference to Mr. Sullivan’s question relating to the disbanding of both organizations, I will say, the American Institute of Architects is recognized in the building laws of several of the eastern states. As an organization, it has some little property. It may be a question whether it is advisable to terminate its corporate existence. It may be determined after looking at its legal status, and the legal decisions that have been rendered, that the best policy for the Institute to pursue will be to retain the old corporate existence, and in that case, it may be said, technically, to have swallowed up the Western Association.

Mr. Ellis: Do not the laws of New York require, by the incorporation of the Institute, that all the members shall be citizens of the state of New York?

Mr. Adler: That will have to be determined by the committee. I mention the fact, that if both committees determine it is best to retain the corporate name of the American Institute of Architects, your committee has not surrendered all your rights.

Mr. Root: I think we can trust the committee with that. It seems to me the organization is competent to take care of that when it comes to the final adoption of the committee’s work. Everything is good that may be suggested in its inchoate existence.

Mr. Sullivan: I don’t understand that my question has been met. My idea was to limit the share of the general liability, and with this end in view I think this joint committee should block out a stand to present at the meeting of both institutions and not leave it possible for a misunderstanding. In it should be contained the essence of this idea if that body should be continued, whether it may be as a hierarchy or not.

Mr. S. A. Treat: Mr. President and Mr. Chairman, I would like to say a word or two if it is order. We have talked about consolidation, fellows, associates, place and time of meeting, but I haven’t heard anyone say a word about financial standing, but there seems to be no one beside myself interested in this matter.

On motion, the convention adjourned until 2:30 P.M.

not confined to Illinois, and that we are now in a position to bring it before the architects of the country for action.

Mr. Root: I agree with Mr. Sullivan that we are in that position, but let it be brought out in the new association.

Mr. Clay: I agree with Mr. Root. We have been deeply interested in this project. We issued something like eight hundred circulars to the architects throughout the country. They didn't suppose they were especially offending Mr. Sullivan's feelings.

Mr. Sullivan: Not at all.

Upon request of a member, Mr. Clay outlined the opinion as expressed in the letters received, as follows:

Mr. Clay: I think there were about twenty letters received. Some of the writers never had any difficulty at all, and all that sort of thing. The most of us had more or less trouble, and the greater part of these letters are of the impression that an association of this kind would be a great advantage. I do not think everyone fully understood the circular. The idea was, if possible, to have established precedents in legal matters that were of essential importance to the profession, and the purpose of establishing a protective league was to select such cases as involved points that were undecided now and have them carried up to the highest courts for adjudication. That seemed to me to be the idea of the circular.

Mr. Illsley: Mr. President, my idea of the circular was that it suggested the formation in each state of a protective league for the purposes enumerated. Allow me to suggest that it would be well to bring the matter up before this convention. We did in our meeting at Kansas City, and endeavored to arrive at a working scheme. I am going to relate to you one or two little difficulties we encountered at the outset. To begin with, we have no money, and we haven't been able to find a lawyer who would work as architects do, without pay. Furthermore, if we should, as lawyers in general go, it would be difficult to find a lawyer whose knowledge of architectural affairs would make his services worth paying for. Our idea was, if we could find such a lawyer, to have him become the attorney of the State Association and be contented with the honor for his emoluments, and in this way we should have someone to go to for an opinion that would be worth going for, and worth paying for. One who, where if we had a case, would encourage us to go on with the suit, and where we had none would discourage the members to the suit not to go on with the case. In this way we calculated to meet with so much success, that our attorney would make such a reputation that the conclusions of our attorney would often induce owners to settle without attempting litigation. Our theory was a very good one, but we haven't found the lawyer yet.

Mr. Root: I think were a suit brought up today by the American Institute it would be very apt to meet with success. The only objection I have to taking this matter in hand now is that I think it would not be wise in us to bring this up while there are so many other matters to be considered. I think it is better to leave it in the hands of the Institute to go on with. I would say this: Within the last three years I have prosecuted two cases for nothing under the sun but to establish a precedent in the state where I live. I carried one to the appellate court and one to the supreme court. The one I carried to the supreme court involved several important matters, one in relation to services that ought to have been done, and another where they did not build according to the plans. The gentleman I sued was a prominent lawyer. He employed three lawyers to conduct his case. I employed one, and instead of employing more lawyers I paid three architects to come over a hundred miles to put them on the stand. I won my case and got my money, and I got damages for carrying it up. The other case was in regard to a private contract. I won this suit also. I would suggest that each architect throughout the country be requested, whenever they have received an opinion which is of importance to everyone, and such are coming up continually, that they get a statement of the case, through their attorney, from the records of the court and send them up to the secretary of the Association. It seems to me that every dollar that is spent in litigation ought to be expended in pushing the matter to a point where we can get the best results.

The Chair: We have already passed a resolution in reference to the Committee on Legal Decisions which covers that suggestion.

Mr. Root: The next paragraph reads: "From so many sources the suggestion has come to us that we determine upon a permanent place of meeting for your conventions. If such a place should be determined upon, probably Chicago would be selected." There are several other matters in the report that have been already acted upon by referring them to the Committee on Consolidation. I think this should be one of them, since we have consolidation in view.

Mr. Sullivan: We do not know yet what the result of the action of this committee will be. We may have no consolidation.

Mr. Root: The next paragraph needs no action since the report of the Committee on Ethics has been acted upon.

The next paragraph relates to a resolution passed at the last meeting of the American Institute, calling attention to the desirability of appointing a clerk of the works on all important buildings. A committee of three was appointed to take the matter in hand, and the board suggests it may be well for this Association to appoint a similar committee.

A lengthy discussion ensued over this paragraph, participated in by Messrs. Yost, Root, Hellmers, Ramsey and the president, in which a large part of it was devoted to the meaning of the word "clerk." The opinion arrived at was it meant to cover the office of superintendent, an office generally filled in important buildings in this country, whose work is to see that the plans and specifications of the architect are carried out, and whose compensation for services is paid by the owner.

Mr. Sullivan: The supposition is that this convention is trying to lift itself by its boot-straps. We all know what the thing is. The question is, what are we going to do about it?

Mr. Root: The question is, do we want this man, or person, and do we consider it of sufficient importance to appoint a committee, as suggested in the paragraph?

Mr. Hellmers: I move it be referred to the Committee on Consolidation.

The motion, being seconded and put to vote, carried.

Mr. Root: The next recommendation is that section 13 be omitted from the constitution.

Mr. Hellmers: May I ask whether you have not overlooked something? I think you have overlooked the suggestion of certificates of membership.

The question of certificates was discussed, and no action was taken.

On motion of Mr. Ramsey, section 13 was ordered stricken out, in accordance with the recommendation of the board of directors.

Mr. Root: This brings us to the recommendation that Article VII be modified by omitting the last clause, "at the next meeting," and that Article VIII be modified to read: "All applicants for membership recommended by the board of directors are to be voted on by letter ballot," as specified by the convention of November 16, 1887, and thirty days be allowed to members to return their ballots.

On motion of Mr. Hellmers, the modifications recommended by the board of directors in Articles VII and VIII, were adopted.

Mr. Root: That Article XII be modified by adding to it, "subject to the approval of the board of directors."

On motion of Mr. Carlin, the suggestions in regard to Articles IX, XII and XIII, as read, were adopted.

Mr. Root: This completes the report except the authorizing the Committee on Legal Decisions to expend an amount up to \$100 under control of the board of directors, and the recommendation of the election of certain applicants to membership. I would like to say a word in reference to this recommendation. I find under the by-laws we exceeded our authority in making this recommendation, which requires the names of the applicants to be received by the board of directors so that their names may be sent to the members thirty days before the meeting of the convention. In view of this fact we ask these gentlemen who desire to become members to exercise a little patience and allow us to postpone their election.

Mr. Ramsey: Who are the gentlemen applying? Are they architects of good reputation?

Mr. Root: There is no objection to the applicants, only that their names came in within the past few days.

Mr. Sullivan: Allow me to ask whether the report of the Committee on Bill governing Office of Supervising Architect has been discussed?

The Chair: Yes.

Mr. Sullivan: What action was taken? I had no knowledge of its being brought up.

The Chair: The report was received, and the committee continued.

Mr. Sullivan: Would it be in order to ask for a reconsideration, in order to add to it?

The Chair: Yes.

Mr. Sullivan: I am pretty well satisfied that the committee will not accomplish anything unless it gets the support of every member of this Association.

Mr. Yost: I voted in the affirmative on the adoption of the resolution, and I therefore move it be reconsidered.

The motion to reconsider was duly seconded and carried.

Mr. Sullivan offered the following resolution, amended by Mr. Allen, as follows:

Resolved, That the Committee on Bill Governing Office of Supervising Architect of the United States Treasury Department be continued in its personnel, and, in addition, that each member of this Association be appointed a committee of one to make strenuous effort toward the desired end, and to coöperate in every possible way; that the Standing Committee be instructed to send to each member of the Association at the earliest time a circular, giving all accessible statistics concerning the government buildings on all points in favor of the promulgation of this bill.

The resolution, being put to vote, prevailed.

Mr. Allen: I would suggest that the circular be not delayed any longer than necessary. If the members could have this circular before the next session of congress it might be of great advantage.

The Chair: We will now take up the communication of Messrs. Smithmeyer & Pelz. It has been printed, and copies are lying on the secretary's table.

Mr. Hellmers: Can I ask what action the American Institute has taken on this communication?

The Chair: Not any, I believe.

Mr. Root: It seems to me it is a subject we have already taken up. It certainly refers to government work in general.

Mr. Allen: In the little talk I had with our congressman, the Library Building was brought up. He said if the Library Building had gone through the government architect's office there would have been no complaint. It was offered as an argument making any change in the government architect's office, and what would come of competition for government buildings.

Mr. Root: I move this communication be referred to the Committee on Bill Governing Office of Supervising Architect.

Being duly seconded, on being put to vote, the motion carried.

Mr. Root: I now move we listen to the report of the treasurer.

Mr. Treat: I have prepared a report hurriedly, which shows the figures up to this time:

Amount brought forward, 1887.....	\$830 33
Received from initiations and dues.....	1,201 67
Making a total of.....	\$2,032 00
Expenditure during the year.....	1,316 83

Leaving a balance in the treasury of..... \$715 17

Mr. Hellmers: I move the report of the treasurer be referred to an auditing committee of three, to be appointed to examine the books and vouchers.

The motion, being duly seconded, was carried.

The Chair: I appoint W. R. Forbush, W. W. Carlin and W. W. Clay that committee.

On motion, the convention adjourned until Friday, at 10:30 A.M.

THIRD DAY'S SESSION.

The convention was called to order by the president promptly at 10:30 A.M.

The Chair: Gentlemen, the first order of business this morning is the report of the Auditing Committee. Mr. Carlin, you are the chairman of the committee, are you ready with your report?

Mr. W. W. Carlin read the following report:

CHICAGO, Nov. 23, '88.
To the Western Association of Architects:

Your committee which was appointed to audit the account of the treasurer, find, with a correction of \$10.64 in favor of the Association, as discovered by Mr. Treat and rectified by him—as the books and vouchers show, as per the corrected statement hereto attached—a balance of \$725.81.

On motion the report was received and the committee discharged.

The Chair: Before we receive the report of the nominating committees, if there is any new business members wish to bring up it will now be in order. There apparently being none we will now receive the report of the nominating committees.

J. F. Alexander is chairman of one, C. E. Illsley chairman of the other; we will hear from Mr. Alexander.

J. F. Alexander reported the following ticket:

For president—D. H. Burnham, of Chicago; first vice-president—L. S. Buffington, Minneapolis, Minn.; second vice-president, W. W. Carlin, Buffalo, N. Y.

Secretary—Normand S. Patton, Chicago.

Treasurer—S. A. Treat, Chicago.

Board of Directors—S. Smith, Omaha; F. Baumann, Chicago; S. M. Randolph, Chicago; F. J. Corser, Minneapolis; J. W. Yost, Cincinnati. C. E. Illsley reported the following ticket:

For president—D. H. Burnham, Chicago; first vice-president—J. W. Yost, Cincinnati; second vice-president—James G. Cutler, Rochester. Secretary—Normand S. Patton, Chicago.

Treasurer—S. A. Treat, Chicago.

Board of Directors—Sidney Smith, Omaha; A. F. Gauger, St. Paul; Charles Crapsey, Cincinnati; W. W. Clay, Chicago; A. Van Brunt, Kansas City.

Mr. Crapsey: Mr. Chairman, as both committees appear to be of one mind regarding the nominee for president, I move you, sir, that the secretary be instructed to cast one ballot for D. H. Burnham, for president of this Association for the ensuing year.

Mr. Clay: I object. My reason for objecting is that I think, in justice to the members of the Association, there ought to be more than one candidate for president presented before the convention, and therefore I intend to make a nomination of a gentleman myself. The committee on the inside have agreed upon one candidate, and I therefore shall take it upon myself to nominate a very modest gentleman, a member of one of the committees, for that office. I nominate W. W. Carlin, of Buffalo, for president of this Association.

The Chair: If there are no further nominations we will proceed to ballot for president. I will appoint Mr. Forbush and Mr. Crapsey tellers.

Mr. Yost: Mr. Chairman, I see by one of the tickets that my name has been placed in nomination for first vice-president. As both of the committees have selected St. Paul as the place for holding the next convention, and as Mr. Buffington, who has also been placed in nomination for the same office, resides in Minneapolis, I think it is highly proper that the office should go to the candidate whose residence is at or nearest to the place where the convention will be held. It is an act of courtesy, I believe, which has heretofore been recognized, and I therefore ask to withdraw my name in his favor.

Mr. Root: I hope Mr. Yost will not withdraw on that account, as there are a number of precedents which might be named where officers have been selected without regard to the place of residence.

Mr. Adler: I trust the gentleman will not withdraw his name on that account. And right here I might as well, in this connection, bring up a matter which I intended to bring up after awhile. It is this: The place of meeting chosen is conditional. If our project of consolidation is developed as we expect it to be, then the next place for holding the convention will be determined by the new organization, and in that event it probably will not be as far west as St. Paul. I think, therefore, that Mr. Yost need not decline on the ground of a sense of courtesy.

A member: Mr. Chairman, I would like to call attention to what I think is a mistake in the ticket of nominees for the Executive Board. I

see Mr. Gauger is put at the head of the list of names, and, as I understand it, Mr. Smith should be the chairman.

The Chair: I believe it was the understanding up to the last convention that the board elected its own chairman. The last convention decided that the outgoing president should be the chairman of that committee. Gentlemen, you will now prepare your ballots for president.

The Chair announced the result of the ballot for president: Whole number of votes cast, 48; of which W. W. Carlin received 26, and D. H. Burnham 22. Mr. Carlin was declared duly elected president for the ensuing year.

Upon being called upon for a speech, the president-elect complied as follows:

Mr. Carlin: Mr. Chairman, and gentlemen of the Western Association: I cannot but feel regret at the turn the affair has taken. It seemed eminently fitting and proper that the gentleman to be honored by preferment to the highest gift of this association would be one who was one of its earnest and efficient workers from the first, and not upon one who came in in the latter days. But, gentlemen, I assure you I am very grateful to you for this mark of your preferment, and if, by doing the very best in the position of duty that I know how, put in the best energy I possess to maintain the success that has always attended this body, I fail in this aim, and fall short of your expectation, it will not be because my most earnest endeavor has not been in that direction. Gentlemen, I thank you.

The Chair: Gentlemen, you will now prepare your ballots for first vice-president. The candidates are J. W. Yost and L. S. Buffington.

Two ballots were made necessary, neither candidate, through scattering votes, getting a majority. On the second ballot, Mr. L. S. Buffington received 26 votes, a majority, and was declared elected first vice-president.

The ballot for the second vice-president was had without an election, seven candidates being voted for. Fifty-four votes were cast; of these, Mrs. Louise Bethune received 22, the highest number.

Mr. Root: Mr. President, I move that the secretary be instructed to cast the vote of this association for Mrs. Louise Bethune for the office of second vice-president.

The motion, on being put to vote, carried unanimously.

Secretary Patton: I announce I have cast the vote of the convention for Mrs. Louise Bethune for second vice-president.

The Chair: Mrs. Bethune is therefore duly elected.

Mr. Root: I move the president be instructed to cast the vote of the convention for Normand S. Patton for the office of secretary of the association for the ensuing year.

On being put to vote, the motion prevailed.

The Chair: I have cast the vote of the convention, and Mr. Patton is therefore duly elected.

Mr. Root: I make the same motion for Mr. Treat, the nominee on both tickets for treasurer.

The Chair: I have so cast the vote and Mr. Treat is duly elected treasurer of this Association.

The next order of business is the election of the board of directors.

Eighteen candidates were voted for. The whole number of votes cast was 48. Of these Sidney Smith received 48, Chas. Crapsey 38, A. Van Brunt 36 and were declared elected. Fred Baumann and S. M. Randolph having received the next highest vote, 19 and 20, respectively, were declared elected on a motion of Mr. Root, empowering the secretary to cast the vote of the convention.

Mr. Ferry: Mr. Chairman, I have a resolution I wish to offer:

Resolved, That the thanks of this Association be tendered to the Chicago Sketch Club for the hospitalities extended to the members of this convention.

By vote the resolution passed unanimously.

Mr. Allen: There is another election yet. I move you, Mr. President, the secretary be empowered to cast one vote for St. Paul and Minneapolis as the "place of meeting" of the next convention, to be held at those places on alternate days.

It was so ordered.

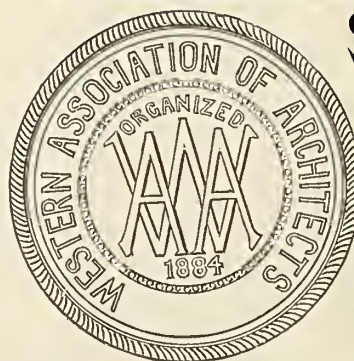
The Chair: I have here a resolution:

Resolved, That the thanks of this Association are due to the out-going officers.

Carried unanimously.

On motion, the convention then adjourned.

To Candidates for Membership W. A. A.



SECRETARY N. S. PATTON, of the Western Association of Architects, issues the following notice, which is important to Architects who are not members of the association:

Your attention is called to the amendment to the constitution adopted at the last convention, by which applications for membership may be sent to the secretary at any time and will be considered by the board of directors at their next meeting. Applications that are accepted by the board of directors will be submitted to a letter ballot of the association, for which thirty days will be allowed. Applications received by the secretary before the 15th of December will be acted upon in time to have the names inserted in the next annual report, to be issued in February.

Those who intend to make application for membership are requested to inform the secretary of such intention and state when their application, with letters and photographs, will be forwarded. Blank forms for application will be furnished by the secretary. Respectfully,

Chicago, November 27, 1888. NORMAND S. PATTON, Secretary.

DECEMBER, 1888.

THE INLAND ARCHITECT
AND NEWS RECORD.

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Construction, Decoration and Furnishing
IN THE WEST.

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AN error occurs in our report of the Western Association Convention in the discussion of the formation of a protective league, on page 73, first column, in which a speech is wrongly credited to J. W. Root. It was made by F. M. Ellis.

THE *Northwestern Architect*, of Minneapolis, which has attained a high rank among architectural journals in the opinion of the architectural profession, has recently secured the services of Mr. F. S. Hunt, formerly news editor of THE INLAND ARCHITECT, in the capacity of manager. Always solicitous for the success of this enterprising contemporary, our interest will, in the future, be greater, if possible. Mr. Hunt, during his five years' connection with this journal, has proved himself to be a young man of ability and energy, and we wish him the greatest possible success.

WHILE Chicago is so centrally located in the field of the important building operations of the country as to be a very convenient point of distribution, the publishers of the Standard Contract have thought best to place the blanks on sale, with dealers in architects' supplies, in the principal cities of the country, and thus avoid the delay of even the day or two required to send to Chicago. Arrangements for this have been made already in some cities, and the entire country will be included as speedily as possible. All orders for blanks with architects' names inserted should continue to

be sent to the Inland Publishing Company, and all orders sent for blanks without names will be filled by them immediately on receipt as heretofore. In this connection we may quote the following comment upon the Standard Contract from the *Builder and Woodworker*, of New York:

Most of our contemporaries feel a little huffed because of our clever fellow worker, THE INLAND ARCHITECT, having secured the exclusive right of publishing and selling the Standard Contracts. For our part, we see nothing wrong in the arrangement whatever, so long as the price has been decided upon. Indeed, we think it much better that one house should have complete control of the printing and sale of the documents, as it will insure uniformity of size, style and paper. As we understand it, this contract was not got up for the purpose of giving a "job" to a lot of hungry journals, but for the purpose of making just and equitable arrangements between owner, architect and contractor. That being the case, we see no cause for a "growl," for it is likely every stationery store in the country that deals in law forms and blanks, will carry a lot of these contracts on their shelves for sale. THE INLAND ARCHITECT will probably see that the typographical part of the contract is as fine as displayed in its own columns. If, so, the public will have no cause to regret the arrangement.

THE problem of heating residences has been taken up by the *Metal Worker* in the form of a competition, in which that enterprising journal offers \$300 in prizes for the best practical essays on heating a given building, by hot-air furnace, by steam circulation or by hot-water circulation. The competition should call forth the best efforts of the experts in the science of heating. The details of the competition are too long to enumerate here, but the publishers of the *Metal Worker* will send full particulars upon application. The competition is open until February 1, 1889.

WHEN one reads in a daily paper of a boy deliberately committing burglary that he may be sent to the penitentiary where he will learn a trade, because he could not get a chance to learn one outside, one is inclined to become somewhat pessimistic in regard to the value of our nineteenth century civilization. Such an incident occurred the other day in Chicago, where, with her million of inhabitants, and her trades generally cursed with unions that destroy all ambition among members and deny the right of all not members to learn trades, there is not a single institution where a poor boy may learn to use his hands and become self-supporting. True, there is the manual training school and the plumbers' night school, both most admirable institutions, but they will not come under the head of free trade-schools; and there are not many cities that have not in some measure moved toward providing for trade education. But Philadelphia has come to the front with a citizen who has not only seen the need of such a school, but has most liberally provided for its establishment and maintenance. Isaiah V. Williamson, of that city, has placed in the hands of proper trustees a trust fund of \$5,000,000, which will establish a trade school for poor boys. The rules of the school will be liberal, the attendance will only be limited by the money to be expended and each pupil will be indentured to the trustees for a term of three years. Surely there must be something in a name when Mr. Williamson so practically shows himself to be a true Philadelphian. There is no greater need throughout this country than the establishment of trade schools, either by government or by private endowment.

THOSE who live in Chicago and know their imperfections, welcome discerning criticism of their shortcomings, and hope, profiting thereby, steadily to improve upon the past. Hence, when Mr. Anonymous "Abacus," architect, of Toronto, Canada, tells, in a three-column letter to the *Canadian Architect and Builder*, his impressions of Chicago, the American citizen reads respectfully, and seeks to learn from the critic who sees us without predispositions in our favor. It is true that one is, at the outset, a little

stumbled by his sweeping assertion that "A commercial people invariably build what will suit their purposes, but nearly always without regard to the beautiful." We think of Nuremberg, with her artisans and traders; of Venice, mistress of the Mediterranean; of Athens, with her colonies and fleets; and we are profoundly sorry that their commercial spirit so hampered and dwarfed their regard for the beautiful. Poor Nuremberg, Pisa, Florence, Rome, Antioch; poor Venice, poor Athens! How altogether too unspeakably sad that, when you were producing your greatest architectural works, you were weighted down by degrading commercial activity! But to return to Mr. Anonymous "Abacus." He tells us a great many things that it is well to heed. For instance, that

A very large number of the most admired buildings of Chicago are planned badly, and inclosed by the most worthless and inartistic façades that it is possible to imagine. It is not the ugliness of poverty, but an ugliness which results from lack of artistic feeling and superfluity of wealth.

Again:

Having money, they [Chicago people] proceed to build for themselves houses in which to live and entertain their friends, and, being in a hurry, the house must be built in less time than is necessary to its thorough and studied designing and complete construction. * * * Very often there is something about the general composition attractive and imposing, but the detail is so crude and so lacking in refinement, that one turns away in disgust. * * * Many times we were disappointed on seeing a building in the distance which composed well, but when examined closely, was lifeless, and very often excessively vulgar. * * * That there is on Michigan avenue only one house which calls for high praise does not speak well for the residents of the street, nor for the architects of the houses. * * * We did not see anywhere in Chicago carving that would call for special mention. It was invariably lifeless, and consequently lacking in interest. * * * The church architecture of Chicago is extremely bad. We did not see a single building (i. e., church) that was worthy of the least attention.

Our critic then preaches a sermon on the relation of the church edifice to religion and worship, and shies a well-aimed brick at the fantastic arrangement of foliage plants at the entrance to South Park.

WITH very much of the above cited criticism we are in entire accord, but certainly not more true of Chicago than other American cities; and, we are willing to accept in good spirit, even the too-sweeping general assertions to which the critic is prone. We also like the works of Mr. Richardson, which almost alone brought unalloyed pleasure to our critic. We also like work that has been done in Chicago by other eastern architects, for instance, by Peabody & Stearns, by Richard M. Hunt, by Andrews & Jacques. We, in Chicago, are not at all given to being jealous of outside competitors who do work in Chicago, and can even find more good work by them than our critic appears to have described. We fear that as much cannot be said for the spirit in which Mr. Anonymous "Abacus" writes of the architecture of Chicago and of the United States. Surely a man must be captious or blear-eyed, or given to walking up back alleys who can write, as he does, that he wandered "all morning through portions of the business center, and in the afternoon explored the South Side without seeing anything meritorious until he came to the pavilion in Jackson Park," or that he was "in the city two or three days before he was successful in discovering any work which was artistically satisfactory." This is rather severe, and we begin to think that if our critic had really been looking for the good that there actually was he might have fared better. But if the above causes us to wonder whether our critic has truly the anointed eye, what shall we say of the following, when, having spoken of the ugliness of Chicago's business buildings and her enterprise in exhibiting wares for sale, he ventures this refined and delectable piece of criticism:

And while we admire the push and enterprise thus shown in the race after wealth, we cannot help pitying a people whose only object in this world seems to be to live like the beasts of the field—only in the highest condition pertaining to beasts—not one thought of another existence, not one desire for refinement in this life, living without culture, without happiness, for all the world as if they were but atoms in the world's existence, and that all is over when their places are taken by the next generation.

Verily, here is a discerning critic who goes into a city with a million inhabitants, stays a week, and, after looking

at the exteriors of its buildings, feels qualified to pronounce such a judgment on the lives, thoughts and aspirations of its inhabitants, one and all. We do not need his pity. We should hardly know what to do with the pity of such a critic. Though there are a few such spirits in the profession, they are generally detested, and are often tolerated when they should be drummed out of the profession.

WHEN we come to the closing paragraph of his letter, the animus which inspires him becomes clear. Some American architects, residing in Buffalo, have, in competition and otherwise, been awarded the execution of important works in Toronto. His local pride is touched and he writes this letter, wherein he vents his spleen on the home government and those who employ Americans, and upon American architects in general, using Chicago as a text. We sincerely thank him for those matters wherein he chanced upon the truth, and charge to its proper source in his wounded pride, the remainder. We also discover why he chooses to remain Mr. Anonymous "Abacus." Herein, at least, he shows his wit. But we would not have it thought by American architects that all those of Canada are biased. In that country, as elsewhere, the true architect allows no sectional feeling to bias his architectural judgment. Toronto is building many of the finest structures in Canada, but the true critic does not ask whether the architects are native, American or foreign.

THERE are a great many forms of insurance that insure nothing more than that the insured shall pay a large premium and receive nothing in return; but reputable companies, aided by state laws, are daily making both life and fire insurance more effective and honest. The tontine plan of life insurance in vogue in Europe fifty years ago was not as equitable as that issued by standard companies of today; but it would probably tax the resources of even Balzac's versatile drummer to find a convincing argument in favor of the rule adopted by the Chicago Fire Underwriters' Association a year ago, which they call co-insurance, and under which its members, comprising most of the companies doing business in Chicago, have been issuing policies since. The rule, written in smooth and somewhat ambiguous language, means that all buildings shall be insured to eighty per cent of their full value, as in case of fire the extra premium will be deducted from the amount of insurance; or, in other words, the owner of a building carries the insurance himself, and in case of fire must pay the company in which he is partially insured the premium upon the full amount of insurance, receiving in return none of the benefits. The effect of such a rule, carried out as it is by an insurance trust or trades union will be either to encourage dishonest men to insure to the full amount of their building or stock and have a fire some dark night, or to cause the honest man to refuse to insure at all. It will also stop the building of fireproof structures, for it will pay the dishonest man to build cheap and burn quickly, and the honest man will carry his own risk rather than build an expensive building and have no protection against its damage by fire without paying a premium that is exorbitant compared with the risk. These two phases of the working of this rule may bring about its correction by those who established it, but if it should not, the state legislature should step in and pass a bill the coming winter, which will not only regulate this, but some other impositions that are practiced in a business that has much of humbug in it at best. The Board of Underwriters claim that the clause is one that is only employed in special cases, and is a matter of mutual understanding. It applies, however, to lumber yards, packing houses and manufacturing plants.

Boston Sketches—The Churches.

BY C. H. BLACKALL.

IN a former paper, Copley Square was alluded to as being the center of the architectural attractions of Boston. The statement was made with special reference to the public buildings, but it applies with equal force to the church edifices. It is extremely doubtful if those who planned the square ever had any idea of the importance it would ultimately acquire, either in social or in architectural lines. The natural surroundings and conditions were none of the best. Built in a marsh, over which many of the present generation have skated in past times, with two great railway lines intersecting less than five hundred feet away, the artistic character of Copley Square, and its immediate neighborhood, has undoubtedly received its strongest and most positive tone from the influence exerted by a single, grand monumental design. Trinity Church has made Copley Square. No architect could plan a building in its neighborhood without feeling spurred on to do his very best, nor would any self-respecting property holder be willing to tolerate a shabby, ill-conditioned structure in the presence of such a dignified pile. Not that all the houses in this region are above reproach, or that all the architects who have builded here have met with perfect success; but somehow one feels that Trinity Church has been a silent criterion, and the work on all sides of it has been at least honest and sincere.

It has been related that Rev. Phillips Brooks, commenting pleasantly upon Trinity Church with Mr. Richardson, a short time before the latter's death, was answered by a regret on the architect's part, that the great opportunity had not come to him later in life. Such a feeling is very easily understood and appreciated by every architect, and yet it may reasonably be doubted if the success would have been any more complete or far reaching in its influence, and there are many who look upon Trinity as Mr. Richardson's best title to fame. Archaeologically inclined critics of a carping turn of mind have been disposed to trace the design to the Salamanca old cathedral, which it undoubtedly resembles in some respects; but the genius of the creator was too personal to be anything but original; and the Old World ideas were wrought into a shape which, while retaining all of the spirit which makes the European work so thoroughly delightful, is neither a copy nor a transcription. It is simply Trinity. In much of his later work the architect has shown a greater freedom in detail, a more positive ease in handling the style which he employed so constantly. It must be confessed that the church is weak in just these respects. The carving, the moldings, the subdivisions, seem more Gothic than Romanesque. The spikey, Byzantine foliage, the rude, studied simplicity of treatment which are such marked features of the Alleghany County Court House, are not to be found in the Boston prototype. The great charm of Trinity is in its mass. One forgets details in looking at it, and only vaguely appreciates that it is built of nicely harmonized tones of granite and brown sandstone; that Richardson himself would regret the carved oak leaves on the front; that there is no visible vestibule or porch, or that the capitals or the side over which the trailing ivy has thrown a friendly vail are perhaps better hidden than exposed. The nave—if such a Gothic sounding term may be applied to the forward part of the church—is undoubtedly too short to sustain all the dignity piled over the intersection. The chapel and Sunday-school amble off in a straggling fashion and the opaque glass windows seem only to be looked at and not through. And yet, when one has conjured up all that envy, hatred and malice, can suggest against Trinity, its glorious presence still remains, compelling admiration, silencing criticism; no basely conceived building can, in the artistic sense, exist in its presence.

The west front has been very much improved by the removal of the tall pyramidal roofs which formerly crowned the slightly marked towers. The façade now presents a straight, almost unbroken sky line, according admirably with the cold, unrelieved character of that portion of the church. There has been a scheme to add an open colonnade, carried across the front, to serve as a cornice or crowning feature; but the design seems better as it is. All the exterior architectural effort is now concentrated about the great central tower, and with so short a nave any flourish at the front might prove of doubtful expediency. The one tower is glory enough for any church, and it but gains by contrast with the simplicity of the nave. There is a view of this tower to be had from the little cloister at the rear and one side of the choir, a standpoint from which the eye takes in a foreground of hard, rudely-fashioned cloister shafts, a broad surface of masonry wall, and then, up and up, until they seem almost to be bending forward to the observer, rise the sweeping lines of the tower. There is just the nice balance between quiet and unrest, between wall surface and foliated shaft, between construction and decoration which gives the design life and motion, while clothing it with an inscrutable, sphynx-like majesty, as though smiling down disdainfully, in its inert strength, upon the puny human hands which created it.

The interior of Trinity does not altogether respond to the promises of the exterior. Whether it be the plaster piers which should be solid

masonry, the weak constructive form of the ceiling, or simply the necessary arranging of the pews and other modern conveniences in such an antique setting, it would be difficult to determine; but there is a different feeling somehow, almost a loss of feeling, which not even the splendid stained glass of the windows can atone for. Good interiors are rare in this country. Perhaps some day an architect will arise who will do for the inside what Richardson has done for the exterior.

Trinity Church is not the only mark of Richardson's genius about Copley Square. A short distance along Clarendon street, at the corner of Commonwealth avenue, is a tall, square tower, with a church attached, to borrow the pungent local expression which so aptly characterizes the appearance of the former Brattle Square church, now occupied by the First Baptist Society. The church is a pretext for the tower, and the tower is simply a huge pedestal for a band of figures, ten feet or more in height, carved in each face of the masonry in half relief, representing the four sacraments, Baptism, Communion, Marriage and Death. Immediately above the figures the tower ends abruptly with some bold machicolations and a low hipped roof, as though the artist had finished his work, and there was nothing more for the architect to do but to stop. The church itself is nothing, either in mass or in detail, but for what it sets out to be; the tower is perfect, and the idea is a very bold one, which even a less talented combination than Richardson and Bartholdi might turn to good account. It is interesting to note in this building the marks of the doubtful, uncertain progress of the architect toward his final beloved Romanesque treatment. The archings are all correctly rounded, the proportions are broad rather than tall and the sizes of the moldings are in unwise proportion to the wall surfaces, all showing a Romanesque intention; but the carving is as essentially Gothic as though it were incased in trefoils and pointed arches or backed by flying buttresses; and Gothic, too, of a sort that is found only in this country—the vernacular Gothic, as someone has sarcastically defined it. Perhaps, however, the deficiency of the carving may be due more to the mason than to the architect, for at the time the church was built Boston could not claim such artistic stone carvers as in later years Richardson found so ready to carry out his ideas.

Returning to Copley Square, the corner of Dartmouth and Boylston streets, diagonally opposite from Trinity, is occupied by the New Old South church, thus called to distinguish it from the original Old South, a wooden structure which is one of the Revolutionary landmarks of the busiest portion of the city, as the new church is a landmark of the Back Bay. The building is placed rather unfavorably, as far as regards Copley Square, the rear of the church seeming to be toward Trinity, while the entrance is on one side and the tower is on the end away from the square. This gives the design an unbalanced look, which is heightened by the fact that the tower has settled somewhat out of plumb and away from the body of the building, as though it were trying to break loose and were dragging the church with it. The interior of the auditorium, which is large and handsome, besides being admirably adapted to its purpose, was evidently made the key to the whole arrangement, being placed so as to command the best light and the readiest access, while the tower occupies the angle next to the chapel, the shaft rising almost unobstructed from the ground. The design is in late Florentine Gothic style, worked out in a warm, mottled yellow and red stone, with trimmings of pale buff and green sandstone. The tower is especially successful as a monumental conception; a plain, square shaft with barely three or four flush bands of the pale stone and but two small lancet windows in its unbroken height of a hundred feet or more above the lines of the church; then expanding abruptly with a high corbeled course, which supports a rich belfry in the style of Giotto's campanile, with banded stone courses in alternate colors, triple archings and a suggestion of elaboration in open-work tracery on each face, while the whole is terminated in an easy manner by a steep pyramidal roof. The motive is a familiar one, but is handled none the less successfully. Indeed, the church has what might be termed good lasting qualities, and stands pretty well the tests of familiarity and long acquaintance, which are apt to stultify the charms of so many buildings, even to the most candid of critics. The architects were Cummings & Sears.

The Arlington street church, two blocks to the east of Copley Square, possesses good lasting qualities of a very different type. It is one of those designs which were made straight out of the book; every detail, every feature copied from good authority—a truly Colonial procedure—with the result that the building has the pure, straightforward effect of such really colonial work as the Old North, or the Park street church, and is a refreshing contrast to some of the work in the same neighborhood. The Arlington street church is peculiarly well situated, having the green masses of the Public Garden for a foreground, and somehow this style of building always seems to require plenty of air and sunshine and the proximity of green fields and trees.

There are other ecclesiastical neighbors of Copley Square which should be visited. The Central Church, corner of Berkeley and Newbury streets, by Richard Upjohn; the First Church, further North on Berkeley, by

Ware and Van Brunt, a quiet, restful edifice; and the Spiritual Temple, by Hartwell & Richardson, close by the Old South, a nondescript in religion, but a very emphatic and interesting study in modern Romanesque. But leaving this portion of the city, there is a church building on Columbus avenue, at the corner of West Newton street, which merits serious study, not so much for purity or correctness in style or beauty, or fitness in detail, as for an indefinite something about the general effect, which is exceedingly pleasing and which gives it the religious character which is so hard to combine with the exigencies of a modern protestant house of worship. It has been remarked that the impression of a French cathedral is always upward—the lines run up; everything seems to culminate in points stretching heavenward; the foliage is aspiring; the crochets and finials all lead the eye above; even the flying buttresses seem to be putting their strong shoulders under the nave and bearing it skyward; whereas, in the English work of a corresponding period, the tendency seems to be downward; the long, unbroken horizontal lines, the square tops to the towers, and the comparative absence of the flying buttresses seem to impart a solid, inert feeling, as though the church were reaching down further into the earth; as though it had always been just where it is; as though nothing could disturb its substantial dignity. It is just this feeling which is manifested in the Columbus avenue Congregational Church, of broad, low-lying foundations, of a superstructure as firm as the hopes taught within it, of a sense of repose and quiet. Surely, such a sentiment is more to be desired in a religious temple than fine carvings, elaborate stained glass, or imposing combinations which compel admiration while they tire us. Perhaps the soft, subdued hue of the stone used has something to do with the success of this building. Perhaps the fact that the auditorium has no basement, and the chapel and Sunday-school rooms are spread out on each side helps to develop the horizontal lines. Success in architecture is always complex in its nature, however simple in result, nor is it probable that this quiet effect was obtained without careful study. Only the ravages of time can give accidental success, and simplicity is, in this part of the world, seldom due to ignorance.

Good ecclesiastical brickwork is rare in Boston. The average citizen is quite willing that his house should be built of the humble material, even though his income figures in the hundreds of thousands, but stone seems to be indispensable for an ambitious church. There are, however, two examples of brickwork which are worthy of study. The Church of the Advent, by Sturgis & Brigham, though of uninteresting external appearance, presents a very successful modern English Gothic interior, which is finished wholly in pressed bricks, with light sandstone trimming, and the woodwork in natural tones. There is also a brick church at the corner of West Brookline and Tremont streets, which has a picturesque tower after the style of some of the Flemish churches—a plain, square shaft, a huge clock window at the top, flanked by corbeled, round turrets, and crowned by a tall slated spire.

Then there are a number of lesser architectural church lights, not forgetting dear old St. Paul's, almost Classic now, with its front toward the common like the porch of the Roman Pantheon and its soft, pleasing interior. There is a good Roman Catholic church on Shawmut avenue, built of dark granite; and the old pre-Revolutionary churches are not to be forgotten. As in every large city, the majority of the church buildings are commonplace, where they are not positively bad in design; but Boston has been fortunate in that nearly all of the larger and more important churches have been given to architects who have answered well to their opportunities. There is hardly a church in the center of the city, or in the Back Bay district which is not pleasing. Nearly all the failures have been happily perpetrated where their influence is felt the least.

A New and Practical Smoke Preventing Device.

THE incorporation of the Illinois Stove Company for the manufacture of stoves for domestic use, brings to notice an exceedingly valuable and practical device. The feature prominent in the make-up of the stoves of this company is the adoption of the Weston fuel burner, which, by the use of soft coal, all the heat products of our cheap soft coals are utilized to the extent of wholly taking up all smoke and leaving but little or no ash. The directors of the company are Boston parties, who, we are informed, are intending the supply of the patented stove throughout the West. The prominent gentlemen connected with the enterprise in Chicago are those who control the Chicago Smoke Consuming Stove and Furnace Company, of which W. H. Turner is president and F. W. S. Rawley is the attorney, they having recently disposed of the territory, including the State of Illinois, to the Illinois Stove Co. If this device for disposing of the smoke nuisance in this city could go into every stove, giving practical results, it could be esteemed a revolution in the use of the soft coals of the West. Until the public see the folly of burning coal, and use fuel gas, they should be compelled to adopt such devices as this.

Interior Work.

BY WILLIAM MORGAN PETERS.

CLUB FURNITURE.

ONE of the most important factors in a modern club house, which should contribute more than almost anything else to the comfort of its members, is the furniture. The wine cellar and the larder, although primary considerations, are dependent for the full benefit of their pleasures on the furniture, as a comfortable dining chair is a necessity to the perfect enjoyment of a long dinner, and a lounging chair even more to the thorough appreciation of its after effects. The question of design in such furniture is a secondary consideration compared to those of comfort and adaptability to requirements, and although eventually of importance should not be taken into account until after the necessities have been determined and then made to conform to these necessities.

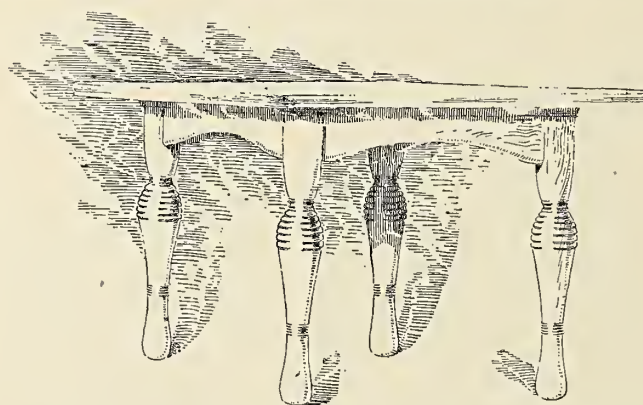
Comfort and utility should command our first attention in making really good, practical club furniture, which considerations in themselves prevent absolute conformity to most set periods of design, on account of our modern requirements differing so greatly from those of former generations in which the styles prevailed, and the greater degree of comfort and luxury now required at a much smaller expenditure.

The following rules are of general application, and, although self-evident and primary necessities to comfort and utility, are generally ignored by designers. As club furniture receives particularly hard usage there should be no sharp corners or edges on any pieces, but all should be rounded so as to receive and give as little injury from contact as possible. This is necessary both on account of comfort and appearance of furniture after a year or more of wear.

Stretchers and braces on chairs and tables should be placed as far as possible in positions that will not interfere with the free movement of the feet or allow of their being placed on them; for, if set otherwise, they are a nuisance, and will soon become so marred as to be wholly shabby and unrepresentable. Particular care should also be taken to have them on tables sufficiently back from the outer edge of top to avoid contact with the legs of people when seated, and the same rule applies to edges of lower shelves. Stretchers between the front legs on all chairs to be used at tables are objectionable and interfere greatly with one's comfort. They should always be placed at least six inches back and cross between side stretchers. Table and chair legs should never be made with any projections on lower portions, as they greatly incommode the free movement of one's feet, and are certain to become disfigured and unrepresentable in a very short time.

The best dimensions and angles for comfort of chairs should be carefully considered, and also all points of convenience in tables and cabinet pieces and designs made to conform to them, not they to the designs; for no matter how good anything may be in design alone, if it falls short of the requirements of comfort and convenience, it is certainly not adapted to the best realization of its usefulness, and is consequently more or less of a failure.

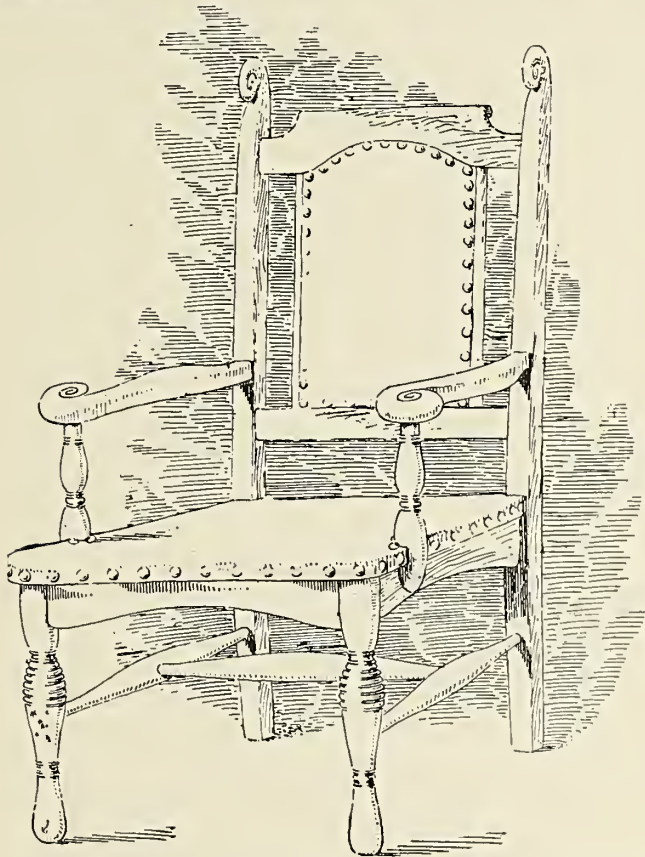
No educated architect or designer will ever stoop to such devices, as the result at best can only be an evident effort, a pretty failure.



The study for originality in such work, if kept subservient to the very best practical requirements, and also to some particular character of design, will, if given proper thought by an educated designer, produce a far more satisfactory and complete result than can be obtained by any caprice of design to which most of the practical requirements were sacrificed.

Legs, rails, stretchers, arms, etc., should each be made in one solid piece of stock, with no glued-on—only to be knocked off—projections whatever, and designs should be made to allow of such construction. Carvings should at all times be made in the solid wood and never glued on, as is too often done to save expense. Many designs will not admit of carving being executed in the solid wood without incurring an enormous

expense for which there is very little effect attained, and this point should be carefully considered and guarded against by designers. It is much better to show all joints instead of trying to conceal them, as if the construction is good the more that is done to make it apparent the more truly artistic will appear the work; from this it is evident that carving should be confined in most cases to separate pieces of framing, as if it flows from one on to another across a joint its pattern tends to conceal construction, and yet the joint still shows, marring the effect of the ornament which is itself at the same time destroying a line of construction. Of course, if this line can be given additional prominence by the design of the carving, one could not do better than to thus accentuate it; but as a rule this cannot well be accomplished.



The chairs may be considered in two general classes—those to be used at tables and the lounging chairs; the former, whether card, writing or dining chairs, should all be made with arms, for greater comfort; legs strongly braced by stretchers where necessary, and the seats slanted from $\frac{1}{2}$ to $\frac{3}{4}$ of an inch toward the back, being 18 inches from the floor at the front. The chair back should have a slant of about $3\frac{1}{2}$ inches in its height from top of seat, which should not be over 18 inches, as this allows one to put the arm over the back and sit half sideways, a position which is sure to give relief after sitting in the required attitude through the numerous courses of a long dinner, or for hours at the card table. Extra high backs are objectionable, first, because of their being uncomfortable in not allowing sufficient freedom of movement; second, because of the difficulty of serving around them; third, because of the crowded appearance so many of them together give to the room; and last, but not least, because of their utter uselessness. In fact, the only places where extra high backs are allowable on chairs is where the pieces will be used chiefly for effect, as in large halls by a fireplace, or against the wall. One sees too many of this high-back species in club rooms. They intercept a view of the room, if standing free from the wall; always look ugly from the rear, and are avoided by everyone who desires to be comfortable, for in making a back high it has to be made so straight to appear well that the angle of ease is altogether lost. This class of chairs should be made as light as will allow of perfect strength in construction, for it is important to have them easily moved about, as well as absolutely firm and rigid, beyond the possibility of loosening joints or racking. It is better to have the seats quite flat, stuffed but very little if at all; in no case having springs, and made with the idea of being as cool as possible. There is no more suitable seat for a card chair than perforated leather stretched over cane, as by this device is secured the good effect of the leather cover, combined with the coolness of the open cane seat. The lounging chairs and sofas are the second class we consider; their forms, dimensions and angles of slant are subject to much greater variation than those of the former class, as the positions of occupants requiring to be accommodated are of much greater variety. It is well to have chairs with two different slants to the backs; one extreme

of about nine inches and one medium of about six inches. The greater the slant of back the greater that of seat also and the lower the chair, if perfect comfort is to be attained. Such pieces are usually made with seats too high; 14 to 16 inches from floor to top of upholstered seat is the most comfortable height, with top of arms from $8\frac{1}{2}$ to $9\frac{1}{2}$ inches above this. Backs may be about 2 feet high from seat, and both should be liberally filled with spiral steel springs set on strong webbing with all hair stuffing. The finished seat and lower part of back being from 5 to 9 inches thick, according to comfort desired. Such pieces are better to be made quite solid and heavy with casters on all legs. They may be covered in heavy tapestry, plush, corduroy or leather not tufted. Tufted seats, fringes or valances of any description are objectionable, as they collect dirt and soon become shabby.

Stock construction and finish are matters of great importance, and the following specifications should be conscientiously observed to attain desirable results. All stock should be specially selected and of handsome grain; lumber strictly clear, free from all sap, knots, wind shakes or other imperfections, and straight grained. All of the concealed constructional pieces which form movable parts, or are subjected to any wear, or which, being fixed, occur in juxtaposition with other such movable parts, should be of ash or other hardwood of equal texture. All other constructional parts which are used as backings, or for filling or gluing may be of butternut or whitewood; all of which lumber should also be of strictly first quality clear grade stock; and all lumber entering into the work should have been first thoroughly air-dried by placing under cover for not less than three years, and then thoroughly kiln dried when it is ready to be manufactured under a uniform temperature of 72° Fahr.

There should be no dowel joints whatever in our construction; all butting and heading joints being framed by good and sufficient mortises and tenons, and all mitered joints shall be secured by a slip-tongue or joggle piece, or both, and further secured by gluing. All panels should be left free to move. Unexposed backing for cabinet pieces should be made of narrow strips, tongued and grooved, and may be securely blind-nailed to place, but in no other parts of the work should nails be employed.

Table tops should be secured to place by hardwood or metal buttons traveling in grooves provided for that purpose; and all tops which are covered with cloth or leather should be framed and flush-paneled to provide against shrinkage.

Cabinets, sideboards, bookcases and other large pieces should be built in sections, all unions being made with double-threaded iron nail bolts. All drawers should be made from cherry or other hardwood, thoroughly dovetailed together at both front and back, the space intervening between said dovetails not to exceed one inch.

Chair frames should be securely blocked at all four corners, having two screws to a block set at right angles to each other, one in each rail. Doors should be carefully fitted and supplied with good and sufficient hinges and locks. Drawers should be furnished with metal handles and such locks as may be required.

A good finish is to treat with one coat of Wheeler's Patent Wood Filler, then one coat of shellac, which should be carefully sandpapered; next, three coats of best furniture rubbing varnish, each coat to be sandpapered, and the last one rubbed in pumice stone and oil to an even egg-shell gloss.

All upholstered pieces should be provided with an abundance of first quality blue steel springs set on strong webbing and filled with best quality of curled hair.

In the illustration pages of this number will be found designs of some furniture which has just been completed for the Denver Club, of Denver, Colorado, and which embodies, both in its design and construction, most of the ideas hereinbefore expressed. The pieces shown are chair and table for card room; chair, table, tray-stand, side-table and extension table for main and private dining room; library table, bookcases, lounging chair and sofa, which, together with other pieces, will be considered more particularly in the next number.

(To be continued.)

THE *Wiener Bau Industrie Zeitung* has recently published an illustrated article on the filtration of air; to free it from dirt, dust, disease germs and other matters injurious to health and comfort. The problem involves many difficulties. The filtering apparatus must be close enough to arrest the finest particles of dust in a city but half of whose streets are properly paved, yet not such as to obstruct the free passage of air, so necessary to comfort in summer; it must not clog readily, must be cleaned easily and not need cleaning too often, and it must be cheap and durable. The day when all these difficult requirements can be united in an air filter is still in the dim future, probably. Among the influences tending to contaminate the atmosphere of Vienna, this writer names "6,283 horses and 10,000 cats, dogs and other beasts." From the prominent manner in which cats and dogs head this enumeration one is led to surmise that the nocturnal air in the capital of the Austrian empire must often contain other disturbing ingredients beside dust, smoke and bacteria.

Chicago Architectural Sketch Club.



THE annual banquet and exhibit of drawings of the Chicago Architectural Sketch Club has become the culminating feature of this the first architectural sketch club in the country. This year a greater effort than ever was made to make the banquet enjoyable and the exhibit of club work complete and effective.

On Monday evening, November 19, about sixty members of the club and guests assembled in the handsomely appointed rooms of the club in the Art Institute. After inspecting the some two hundred sketches which covered the walls entirely around the assembly room, the seats at the banquet table were occupied by the full membership of the club and their guests. Following is the list—those not present marked by an asterisk :

Members—

George Beaumont,
W. G. Williamson,
C. A. Kessell,
J. H. Carpenter,*
M. H. Church,
R. C. McLean,
Paul Muller,
F. R. Hirsh,
J. F. Hetherington,
L. H. Heinz,
W. R. Gibb,
F. L. Lively,
T. O. Fraenkel,
Oscar Enders,
M. G. Holmes,
R. B. Williamson,
C. W. Trowbridge,*
R. Wood,
R. E. Schmidt,
F. L. Linden,

W. R. Ray,*
E. J. Wagner,
W. B. Mundie,
C. F. Jobson,
O. C. Christian,
J. H. Coxhead,*
C. B. Schaefer,
A. R. Niemz,
R. A. Dennell,
O. C. Smith,*
Geo. A. Shoeneberg,*
A. W. Hompe,
A. Heun,
R. E. Schmidt,
Chas. F. Whittlesey,
H. C. Trost,
Henry H. Braun,
A. Y. Robertson,
F. Parmentier.

Junior Members—

D. H. Perkins,*
R. F. Sollitt,
A. C. Berry,

J. A. Miller.
E. H. Seemen.

Honorary Members—

John W. Root,*
F. S. Hunt,*
H. W. Culbertson,
J. K. Allen,
Harry Lawrie,*
F. L. Blake,*

W. L. B. Jenney,
L. H. Sullivan,
F. Wagner,
Frank Enders,*
H. L. Gay.

Guests—

Oswald R. Lockett,
Louis Muller, jr.,
James John,
E. Spierling,
Oliver Sollitt,
Martin Moylan,
E. S. Bushnell,

W. E. Kleinpell,
D. G. Phimister,
G. P. Williamson,
F. A. Wright,
F. Henderson,
J. Howenstein.

After discussing an elaborate *menu*, during which the stiffness of the average banquet was exceedingly noticeable by its absence, the presence of several architects who remembered when they were draftsmen themselves, and perhaps the *bonhomie* of the Beaux Arts at Paris, only adding to the general good-fellowship, toastmaster George Beaumont rapped for order, which he received in a degree which was complimentary under the circumstances, and called upon Architect W. L. B. Jenney to respond to the first toast of the evening, "The Architect."

Always a pleasant after-dinner speaker, Mr. Jenney's remarks were not only bright and facetious, but contained some good advice. He congratulated the members upon the use of opportunities for sketching and watercolor work, an enjoyment they would not find time for when later they engaged in active professional work; when the routine and detail of office work would take its place. One department of work in which draftsmen could not exercise too much care and thoroughness was in the preparation of details, and a place for study was on the building; and in this connection spoke of the sagacity and experiences of contractors, which was often a material aid to draftsmen and architects.

Architect Louis H. Sullivan, who, with Mr. Jenney and Mr. Root, compose the adjudicating committee of the club, said the draftsman's work should grow, and each design have a definite purpose. A certain conception should be formulated before the design was commenced. The exhibit

of club work was extremely beautiful and exacted enthusiasm and admiration, but suggested work that would invite a critical spirit but from two standpoints, that of recreation and of serious work. The exhibit partook of the former. It would not be amiss for the club to pay more attention to systematic and serious work and make a thorough study of the source of architecture and the five orders. Mr. Sullivan closed by congratulating the club in unmeasured terms upon the work of the year.

After a song by Mr. Beaumont, the health of the Chicago Builders' and Traders' Exchange was drunk standing. Mr. James John, secretary of the exchange, responded in behalf of the officers and members, in a neat speech. Mr. Beaumont said that it was owing to the generosity of the exchange in donating the use of their rooms entirely free of charge to the club for two years that it was enabled to fit up the present quarters, and their courtesy would not be forgotten by the club.

Mr. D. G. Phimister gave a recitation of a scene from "Macbeth," and on a recall recited "Spartacus." Mr. Phimister was toasted.

Songs written by the club poet, R. B. Williamson, were sung to "Vive la compagnie" and other familiar tunes. The following, "The Boys of the C. A. S. C.," will show how some things that seem immensely funny when spoken or sung under certain conditions look in cold type:

In Chicago's fair city
There's buildings so pretty,
Designed by the boys of the C. A. S. C.
The boys are so jolly,
They're artists, by golly,
And on every street corner their buildings you see.

Chorus.—Then here's to the artists,
For they are the smartest;
Then hurrah for the boys of the C. A. S. C.

There is Fraenkel and Enders,
They go on great benders
When out with the boys of the C. A. S. C.;
They go home at night,
Hang their hats on the light,
And hate in the morning the sunlight to see.—*Chorus.*

There is W. B. Mundie,
Who gets up on Sunday,
And sketches the sun coming over the lake;
(The day-breaking sinner)
Then goes home to dinner,
And fills up his basket on pud, pie and cake.—*Chorus.*

There's Williamson's brother—
He's just such another—
He stays out at night and paints red the West Side;
This night-prowling devil
Is ever quite civil,
And a downright good heart is cased in his hide.—*Chorus.*

Our treasurer's a lalla;
He collects every dollar
That belongs to the club called the C. A. S. C.;
And those in arrears
Will get boxed on the ears;
If they do not pay up they will get the G. B.—*Chorus.*

Now at every club meeting,
When Beaumont is speaking,
And arguing a question with Gibb, don't you see,
Parliamentary rules
Were made but for fools,
And not for the boys of the C. A. S. C.—*Chorus.*

Now while you are here
Partake of good cheer,
And make the night merry as long's you can see;
So drink and be jolly,
This night of our folly,
And remember this banquet of C. A. S. C.—*Chorus.*

"The Friends of the Club" was responded to by Mr. O. R. Lockett, who thought it impossible to find humor in hardware, but he came early to the banquet, as he interpreted the "R. S. V. P." on the invitations to mean "Refreshments served very promptly." Mr. Lockett professed to be unused to public speaking, and recited an experience of thirty years ago in the backwoods of Canada, where he spoke on temperance and tortured an audience for sixty minutes. He aptly said: "We cannot all be orators any more than we can all be architects, but if we cannot be the lightning's flash we can be the foil." Mr. Lockett closed his remarks, which were humorous and fully appreciated by his audience, by a sketch of how a client sometimes selects hardware.

"The Architectural Press—the watch-dog of the profession," was responded to by H. L. Gay, who said, in effect, that the press is a sort of evolution. It comes when it is needed. His experience in the architectural press came by entering into the spirit of the profession, and a wish to do something outside of the profession. In his experience, which was small, going back but four years, he believed something in the way of concentrated effort had been done. He spoke of his exhibit of building materials and its history, and, in closing, said the sketch club occupied a position above all joint associations in the profession, for it showed an enthusiasm above anything in the Western Association of Architects, and congratulated the members on their opportunities for artistic work.

Numerous other toasts were responded to by members and guests, among them being a toast to F. S. Hunt, an honorary member of the club, formerly news editor of THE INLAND ARCHITECT, who has taken the management of the *Northwestern Architect*. This toast was proposed by O. C. Christian. Another toast was to Architect J. W. Root, who was unavoidably absent, but who sent an excellent bowl of punch, which seemed to be appreciated and evoke as much enthusiasm as the donor might have done had he been present. Mr. Root's absence was the one expressed regret of the evening. F. Wagner, of the Northwestern Terra-Cotta Works, read a humorous composition, "A New Genesis," in which he told "how terra-cotta was first made; why devils were created, and why we have no wings." Mr. Gibb recited some humorous poems, and the banquet closed with the singing of "Auld Lang Syne" in chorus.

In regard to the exhibit of watercolor work, which represented not the year's work of the club, but its recreation, too much cannot be said in its

praise. From a purely artistic standpoint it is probably the finest exhibit of amateur watercolor sketching ever exhibited in Chicago, and whatever the draftsmen may be in the designing and constructing of buildings, as artists, with a conception for color and a skill in interpreting and expressing it, the members of the Chicago Architectural Sketch Club certainly stand well in the line of watercolor artists.

Illinois State Association of Architects.

THE regular monthly meeting of the Illinois State Association of Architects convened at the assembly rooms, Monday, November 19, at 1 P.M. There were in attendance: Samuel A. Treat, R. C. Berlin, A. J. Pierce, H. W. Hill, W. W. Clay, S. M. Randolph, John W. Root, C. L. Stiles, L. D. Cleaveland, D. Adler, Alfred Smith, Geo. Beaumont, C. J. Warren, N. S. Patton, Frederick Baumann and L. H. Sullivan.

Building Inspector W. R. Forbush, of Cincinnati, was present as the guest of the association.

After the luncheon was partaken of, President S. A. Treat called the meeting to order, and requested First Vice-President L. D. Cleaveland to take the chair.

On assuming the chair, Mr. Cleaveland called for the reading of the minutes of the September meeting, which were read by Secretary R. C. Berlin, and were approved as read. The October meeting was the annual meeting, and was postponed because a quorum was not present. The business of the annual meeting of the association was announced in order.

Treasurer H. W. Hill then submitted his report, which shows a membership of forty-eight and a balance in the treasury of \$967.67.

On motion of D. Adler, the report of the treasurer was referred to the Auditing Committee, and if found to be correct, to be approved.

Mr. W. W. Clay, on the part of the Executive Committee, submitted a report of a number of answers to the circular which had been sent out, requesting opinions as to the formation of an architects' protective league. A majority of them were favorable to such an organization.

Mr. Adler moved that the efforts of the Executive Committee in this direction be continued; that they endeavor to get as many opinions as possible, and that if the consolidation of all the architectural associations is effected, which would probably take place before the close of the present year, then that the entire matter be turned over to that new united association.

This motion prevailed unanimously.

A brief discussion then ensued in regard to arrangements for the entertainment of the members of the forthcoming convention of the Western Association of Architects, to be held in this city, November 21, and the part to be taken by the Illinois State Association, after which the chair announced the election of the officers for the ensuing year in order.

A committee, consisting of D. Adler, John W. Root and W. W. Clay, was appointed to report two tickets to be voted upon.

Mr. D. Adler, on the part of this nominating committee, submitted the following tickets:

First ticket—For president, W. W. Clay; first vice-president, S. M. Randolph; second vice-president, Frederick Baumann; board of directors, S. A. Treat, R. C. Berlin, N. S. Patton, L. H. Sullivan; treasurer, L. G. Hallberg; secretary, A. J. Pierce.

Second ticket—For president, S. A. Treat; first vice-president, L. G. Hallberg; second vice-president, J. J. Flanders; board of directors, S. S. Beman, M. Roche, Alfred Smith, C. L. Stiles; treasurer, C. M. Palmer; secretary, Geo. Beaumont.

Messrs. S. M. Randolph and R. C. Berlin were appointed tellers.

On motion, the balloting proceeded by voting for the several officers in their order.

Sixteen votes were cast for president, nine being necessary to a choice, of which W. W. Clay received nine votes and S. A. Treat, seven. Mr. Clay was declared elected.

Fifteen ballots were cast for first vice-president, eight votes necessary to a choice, of which L. G. Hallberg received eight votes and S. M. Randolph, seven. Mr. Hallberg was declared elected.

Sixteen ballots were cast for second vice-president, nine votes being necessary to a choice, of which Frederick Baumann received fourteen votes and Jno. J. Flanders, two. Mr. Baumann was declared duly elected.

In the balloting for the board of directors the vote was begun under a misapprehension, Mr. Adler inadvertently giving the name of Mr. Beaumont as one of the candidates instead of Mr. Beman. The balloting having been nearly finished before the error was discovered, it was decided to let the balloting be completed as it stood. The result elected Messrs. Treat, Sullivan, Beaumont and Stiles, by eleven, nine, nine and eight votes, respectively.

As two of the board of directors-elect were to hold over two years and the term of two expire in one year from date of election, it was decided before the ballot was taken that the two receiving the greatest number of votes should hold the long term. Mr. Treat receiving eleven votes, Messrs. Beaumont and Sullivan nine each, it was left to be decided between the two last-named gentlemen themselves, who should hold the long term.

The ballot for directors consuming much time, the chair appointed Messrs. Stiles and Smith tellers to take the vote on treasurer.

Eleven ballots were cast, of which Mr. C. M. Palmer received eight, and Mr. L. G. Hallberg, three. The former was declared duly elected.

Mr. Beaumont, the nominee for secretary on the second ticket, having been already elected one of the directors, on motion of Mr. Root, Secretary Berlin was instructed to cast one ballot for A. J. Pierce as the secretary-elect of the Association.

On motion, the meeting adjourned to December 16.

THE publishers, Messrs. André, Daly & Co., of Paris, have issued in pamphlet form a series of essays by M. Chenevier, architect, entitled, "The Burning of the Opera Comique and Safety in Theatres," which is favorably noticed in *La Semaine des Constructeurs*.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Sixth annual convention will be held November 20, 1889, at St. Paul and Minneapolis. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1889, at Philadelphia. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the second Monday after the first Tuesday of every month. Annual meeting, October, 1889. O. J. Pierce, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next meeting at Rochester. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1889, at Dayton. F. J. Otter, Dayton, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon or each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. G. M. D. Knox, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October in each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. C. A. Kessell, secretary. Annual meeting, November, 1889.

ARKANSAS SOCIETY OF ENGINEERS, ARCHITECTS AND SURVEYORS.—Second annual meeting November, 1889, at Little Rock. A. G. Gibb, secretary.

MICHIGAN STATE ASSOCIATION OF ARCHITECTS meets at Detroit on the first Thursday of each month.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The regular meeting of the Edinburgh Architectural Association was held November 15, in the Architectural Hall, 42 George street; Professor Baldwin Brown, president, in the chair.

Mr. J. Crabb Watt delivered a lecture on "The Esthetics of City Building." Selecting Edinburgh as a type to which the abstract principles, discussed in his previous lecture, might be applied, he proceeded to refer first to the burghal and then to the urban architecture. Under the first branch, he touched incidentally upon the late municipal buildings scheme. With the exception of the site of the Bank of Scotland, the proposed situation, he thought, was the finest almost in Europe for such a purpose with respect to the base, elevations and sky-lines. At the same time his impression was that no buildings which did not exceed at least £200,000 could ever afford satisfaction to themselves or pleasure to strangers, and certainly would not satisfy the requirements of esthetics. In the second part of his subject he dealt at considerable length with the structure and features of the new town. At the outset he expressed regret at the evident unwillingness or obstinacy of the south side contingency of the town council to eradicate the source of disease and uncleanness at the base of the new town. Dealing with the beauties of the architectural style of the buildings, he spoke of George street as being the finest street he had seen in any town,—and said he had seen many towns here and in five continental countries. Ruskin's criticisms of Edinburgh architecture received considerable attention from the lecturer, who thought that he had gone entirely astray in the views which he had adopted. He next spoke strongly in favor of the adoption of grotesque ornamentation to a greater degree than hitherto, but gave a word of warning against perpetrating

vulgarism in stone, as at Brussels. Esthetics, he said, above all things demanded variety of perspective and pure taste in detail; and in his opinion they had a good deal to learn in regard to their cornices and the ornamentation of their front elevation. As a practical suggestion he thought that an esthetic council might be established, or the constitution and power of the Dean of Guild Court enlarged.

MICHIGAN STATE ASSOCIATION OF ARCHITECTS.

The Michigan State Association of Architects, which has its headquarters and membership chiefly in Detroit, holds regular meetings on the first Thursday of each month, at the association rooms, No. 16 Congress street, Detroit.

CHICAGO ARCHITECTURAL SKETCH CLUB.

The recent banquet of the Chicago Architectural Sketch Club was a perfect success. A full description will be found on another page.

The first competition of the series for the coming year will be a design for a stone mantel; the mantel to be eight feet wide; drawings quarter scale. Competition closes December 31.

The first regular meeting of the club year was held December 3. C. A. Kessell called the meeting to order and introduced President-elect W. G. Williamson.

Mr. Williamson called the newly elected officers to take their places. The minutes of the last meeting were read and approved, and Secretary Kessell read the report of the auditing committee, Richard Wood and Morris G. Holmes, upon the treasurer's report, which showed a balance in the treasury of \$357.86. After roll call, which showed a remarkably full attendance of members, Mr. F. Wagner, of the Northwestern Terra-Cotta Works, read a paper upon architectural terra-cotta. Mr. Wagner illustrated his remarks upon the blackboard. He will revise his paper, and it will be printed in a future number of THE INLAND ARCHITECT with illustrative sketches.

The syllabus for the coming year is not yet completed, but will include a large number of interesting papers, and important competitive subjects. It will appear in a future number.

ARCHITECTURAL LEAGUE OF NEW YORK.

The following circular has been issued by Secretary Wright, of the Architectural League of New York:

November 28, 1888.

DEAR SIR,—The next regular meeting of the League will take place at Morrello's Restaurant, No. 4 West Twenty-ninth street, Monday, December 3, dinner being served as usual at 6:30 P.M., with one-half the expense of each plate defrayed from League funds.

An amendment to the constitution, defining the responsibilities of the trustees, as per printed notice already given, will be offered for action.

Mr. Russell Sturgis will read a paper on "Architecture without Decorative Art."

The gold and silver medal of the League will be on exhibition.

According to a resolution adopted at the last meeting, the executive committee take pleasure in announcing that the papers read before the League during 1888 will shortly be issued in pamphlet form and sent to both resident and non-resident members. Arrangements have been made for the presence of a stenographer at the monthly dinners hereafter, and monthly or quarterly publications of proceedings.

The executive committee have decided to give a reception to members and their invited friends on the opening night of the exhibition, which will be Saturday, December 22.

The Committee on Current Work herewith announce the second monthly visit around New York, through the courtesy of Mr. Whitelaw Reid, who will open his house to members bearing cards, duly signed, on Monday afternoon, December 3, from four to six P.M., at No. 451 Madison avenue.

By order of the executive committee.

F. A. WRIGHT, Secretary.

DETROIT ARCHITECTURAL SKETCH CLUB.

The draftsmen of Detroit organized a sketch club about seven months ago, which is already showing considerable progress. The club has about eighteen members, and has already had six competitions and averaged fifteen competitors in each. The membership is increasing and the club has the hearty approval of the architects of the city, and they decide the competitions of the club at the monthly meetings of the state associations. At the recent semi-annual meeting of the club, the following officers were elected for the year.

President, James B. Nettleton; vice-president, Maxwell H. Grylls; secretary, George Harvey; treasurer, Richard Mildner. The executive committee is composed of the officers and Messrs. Kahn, Hockett and Pasco.

The last meeting of the club was held December 6, and the regular meetings occur every other Thursday. The competitions are every two weeks the next subject being a Gothic dormer.

Correspondence.

The following letter is printed as a sample of many received from draftsmen all over the country. The name and address is omitted for obvious reasons:

Editors Inland Architect:

DETROIT, December 4, 1888.

I am an architectural draftsman, and being out of a situation and finding it impossible to secure one at present here, wish to try my luck in some other city. I take the liberty of writing to you first for advice as to what part of the states would be the best for me to go. Hoping I am not imposing on your valuable time by asking this favor, I am,

Yours truly,

There is but one answer to letters of this kind from draftsmen. It is impossible to state in what part of the country there is the greatest demand for draftsmen, as we have found that this is not governed entirely by the volume of work. We have applications from architects asking for draftsmen, and we send them the names on file in this office which we think will suit. At some seasons one section of the country will "boom" and there may be a corresponding demand for help. Chicago at the present writing is doing a steady building business, but there is little or no demand for draftsmen. We would advise and cordially invite all draftsmen wishing to change, to send us their names, with some description of their

experience, and all architects in need of help to communicate with us. We are always glad to further the interests of each. It might be well to state in this connection that there is a general demand throughout the West, and positions in western cities pay better than in large eastern cities.—EDITORS INLAND ARCHITECT.

Our Illustrations.

Residence at Milwaukee, Wis.; George B. Ferry, architect.

Boston Sketches, Part III, Churches; J. A. Schweinfurth, Del.

Design for country church; Buffalo Architectural Sketch Club competition.

Residence for A. L. Wilsten, Lynchburg, W. Va.; L. S. Buffington, architect, Minneapolis, Minn.

Design for a store front awarded first place in competition of Kansas City Architectural Sketch Club.

Furniture designed and produced by William Morgan Peters, Chicago, for the Denver Club, Denver, Col.

Bank and office building at Aberdeen, D. T.; Irving K. Pond and Allen B. Pond, architects, Chicago.

Semi-detached houses for W. Wagner; E. G. W. Dietrich, architect, New York; cost, complete, \$9,500.

Mantel designs awarded first, second and third place, respectively, in competition for a \$300 mantel in hall by Detroit Architectural Sketch Club.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence at Washington, D. C.

Residence for George L. Miller, Chicago; George O. Garnsey, architect.

Residence for H. H. Vail, Lafayette avenue, Cincinnati, Ohio; James W. McLaughlin, architect.

Proposed temperance temple, to be erected at Chicago by the Woman's Christian Temperance Union; Burnham & Root, architects.

Residence of Mr. Barber, corner of Wauban avenue and Wellington street, Lake View, Ill.; Gilbert & Taylor, architects, St. Paul, Minn.

The incomplete church of the Covenant, corner Halsted street and Belden avenue, Chicago; Burnham & Root, architects. The tower will be the principal feature of this church.

A New and Valuable Copying Process.

THE large offices in Chicago are using a process for reproducing drawings that should be investigated by every architect. It is to be found at room 48, Ashland Block. It goes beyond every process for duplicating working drawings heretofore used, both in its accuracy and permanent qualities, and in that all walls, partitions, sections, etc., are colored as in the original at *one impression*. The work is so perfectly and quickly done that it will become one of the great economies in every large office. It will pay architects and draftsmen to look into it.

Mosaics.

THE Standard Contract has already been adopted by many influential contracting firms and leading architects. It is printed by THE INLAND ARCHITECT, Chicago, and sold at prices fixed by the joint committee which framed it. The price is very low, being less than a cent apiece in quantities of 500 or more. It is gotten up in first-class shape and printed on a high grade of paper. The committee's action in giving it to one firm to handle was wise, and this protection, added to that gained by copyright, was due to owners who are parties to any contract made under this form, and who were not consulted in the framing of its provisions.—*Northwestern Builder, Decorator and Furnisher*.

THE desirability of having a satisfactory window-sash lock is patent to all who live in houses. One of the most meritorious locks of this description is that known as "The Champion Safety Lock," manufactured by the Champion Safety Lock and Novelty Co., of Cleveland, Ohio. It locks the sash at any desired position; cannot be picked from the outside, and binds the sashes together, when locked, so as to answer the purpose of a weather-strip. They are made as a surface lock, a mortice lock and a meeting-rail lock. They are neat, durable and cheap, and have the universal indorsement of the architects in the city where they are made, and highly commended wherever they have been tested.

A TEST was recently made at Hamilton, Ont., of a new kind of wire lathing, the invention of Messrs. B. Greening & Co., manufacturers of wire-work. The inventors simply propose to substitute for lathing a sort of wire screen. This is fastened to strips of crimped iron. The strips are an inch wide, and when fastened to the joists edgewise they keep the screen and plaster an inch from the wood, and render the walls fireproof. The new material and method was subjected to intense heat over a furnace without cracking the plaster or scorching a joist placed an inch above the plaster. The new material will be manufactured by the Greening Co., who had a sample of their invention at the Toronto Exhibition, where it attracted much attention.

RICH effects in color are the study of the architect and builder. Even to details it is being studied. In the largest structures, not only the stone has various hues, paints numerous shades, but in the brickwork the mortar and cement are given tints—red, brown, buff, and oftentimes black. Very apparently this idea of staining or tinting mortar is growing in favor. The effect of contrast with pressed brick is pleasing and agreeable to the eye. In view of this, the question of the coloring matter used in the tinting of mortar and cement is an important one. Such as contain salts, especially, are to be avoided, from their tendency to deface the brickwork by unsightly white deposit. Perhaps nothing has yet been introduced for the purpose of making colored mortars more meritorious than what are

known as the "Pecora mortar stains," i. e., pulp stains. They have been highly indorsed by reputable builders as having thoroughness of coloring quality, permanency, imperviousness to dampness and atmospheric change, and without deleterious effect on the strength of the mortar. These goods are manufactured by S. Bowen Sons of Philadelphia, who are represented in Chicago by A. F. Shuman, and at St. Paul, Minnesota, by Elmer Marshall.

A. G. NEWMAN, 1180 Broadway, New York, has issued a most complete catalogue and price list of the several hardware specialties manufactured by his long-established house. It is a well-bound quarto, of 415 pages, on first-class paper, splendidly printed, and prodigally illustrated with fac simile designs. It is a publication every architect and builder will appreciate. The specialties priced and shown include "first-class builders', railway and bell-hangers' (mechanical and electric) hardware; bronze and brass hand railing; bronze, brass and iron gates and grills for front-door vestibules; counter fronts, etc." An index of three pages, alphabetically arranged, listing the voluminous contents, enhances the value of the book.

THE Herendeen Manufacturing Co., of Geneva, N. Y., have sent their new publications on steam and hot water heating, and also their essay entitled "Modern Greenhouse Heating" which latter will be found of special interest to florists and all owning conservatories. This company is manufacturing the celebrated Furman Boiler, a low-pressure, automatically-governed apparatus for the domestic warming of all kinds of buildings from a cottage up to a good sized church. This boiler is very durable and simple in construction, and should be, we think, very efficient and particularly economical in consumption of fuel. The combustion is good, the heating surfaces well arranged, and the circulation rapid. It is used successfully in burning soft coal as well as hard, therefore combining two features seldom found in the ordinary house heater. The manufacturers present strong claims and they are evidently fulfilled as a strong guaranty is placed on each boiler. Full illustrated catalogue and books on warming are mailed free on application.

THE advertisement of a mortar color is published in this issue, which, though first placed upon the market but three years ago, has taken a position markedly in the front rank of not only domestic, but imported colors. We refer to "Clinton Red Hematite," manufactured by the Clinton Metallic Paint Co., of Clinton, New York, and New York City. This company operates large and extensive mills situated in the town of Clinton, where the mortar color is manufactured in connection with their paints. The plant is complete, with a capacity for many tons per day, and the demand which has grown for their product during the three years the company has been in business would seem to more than ratify the claims which the manufacturers and consumers make for their product. "Clinton Red Hematite" is claimed to be a color of unusual strength, to possess the property of hardening mortar equal to the best Portland cement to be absolutely "fast," to stand all tests of acids, etc., and being a purely natural color, its permanency can hardly be questioned.

THE recognition in these latter days of that great harm-worker, sewer gas, has made it a prime factor in the question of sanitation, which has become one of paramount importance in modern building construction. To overcome it, as far as may be, has been the problem endeavored to be solved in all correct and proper plumbing. A number of meritorious devices have been born of this endeavor, among the best being known to architects and builders as "The Bower Sewer Gas Trap." It would take greater space than can be given to describe its differences from other devices of the kind, but those interested can procure a pamphlet from the manufacturers, P. B. Bower & Co., Cleveland, Ohio, giving full and complete information regarding it. The principal difference noted in the trap lies in the application of a rubber ball float valve, which is placed beneath the end of the inlet pipe, which permits an easy out-passage of water, and at the same time as effectually cuts off all communication between the water seal on the sewer side. It also makes a seal against back-water from sewers and drain pipes, and syphonage is no longer a *bête noir* by its use. Among its other merits are its simplicity of construction—non-liability of getting out of order—accessibility, self-cleansing quality, and adaptability to all manner of house pipe drainage. To say it has received the encomiums of sanitary engineers, chemists and boards of health and health officers, as well as architects, is a sufficient guarantee that this Bower trap is worthy of investigation of the profession and house owners.

MESSRS. E. C. STEARNS & CO., of Syracuse, N. Y., manufacturers of specialties in hardware (among which might be noted the Warner Parlor Door Hangers), send the following: "Manufacturing the Stuart Window and Door Screen was commenced by us in 1886, though our business of that year was scarce more than a beginning; our sales were small compared to later developments, but they very soon increased in volume, necessitating an almost immediate revolution in our modes of manufacturing; demanding at once new machinery of the most improved pattern; many time doubling the number of workmen at first employed; requiring new and larger buildings; crowding us to adopt new and quicker methods, so that at the end of the second season we found, instead of one article simply added to our line, we had actually added an industry complete in itself, the volume of which may be clearly comprehended by a perusal of the deductions obtained from our books showing all sales to October 1, 1888. The number sold to date mentioned, of the 'Stuart Window Screen,' is 386,220 sets, which would supply 64,370 dwellings, allowing six screens to each; and of the 'Stuart Doors,' the number sold is 75,768 sets, which would provide screen doors for 37,884 dwellings, allowing two doors each. In lineal feet the molding used for windows amounts to 12,081,840 feet, and of the doors the molding measures 3,077,088 lineal feet. This if laid end to end would reach from New York City to San Francisco, or from Victoria, B. C., to the City of Mexico. We have made for use on the same of the Stuart Door and Window Corners, 214,889 pounds, or 107 tons of castings, and, taken together with the frames, make a total weight of 2,771,129 pounds, or 1,385 tons; to move which would require 138 freight cars of ten tons'

capacity, that amount being an average carload, on account of the bulky nature of the goods. The windows are packed in cases, containing three dozen each, size 44 in. by 18 in. by 18 in., requiring 10,728 cases. The doors are packed in cases of one dozen each, size 96 in. by 15 in., requiring 6,314 cases for the doors; making together 135,861 cubic feet, from which a column twenty-five feet square and over two hundred feet high could be made, all of finished frames ready for shipment. We have in course of construction large and commodious warehouses especially arranged for this branch of our industry."

THE subject of proper house drainage has become a prominent factor in the problem of modern construction, and to none other has more serious thought and philosophical study been given; the result of which is that many creditable devices have been created of more or less merit. Perhaps none have more nearly approached the requirements of the sanitary engineer than the appliances of the Sanitas Manufacturing Company, which is advertised in this issue, and to which particular attention is directed, as the "Sanitas" plumbing appliances have, through their special merits, gained an enviable fame. These appliances comprise traps, water-closet, washbasin, bathtub and sink apparatus, all so constructed that syphonage, back pressure and the stoppage of piping is entirely overcome. The manufacturers are represented by agencies in Chicago, Boston (head-quarters), New York, Cincinnati, San Francisco, and Ottawa, Canada. Information can readily be obtained by application to the home office or any of the agencies.

Railroad Notes.

SOLID vestibuled trains now run over the Michigan Central Railroad, "the Niagara Falls Route," between Chicago and Buffalo. These trains are not only equipped with the finest Wagner palace sleeping cars, but are made thoroughly complete by having vestibuled dining, smoking, first-class and baggage cars.

A NEW Pullman palace sleeping car line between Chicago and Philadelphia has been established, via Chicago & Grand Trunk and Lehigh Valley railroads. Limited express leaves Chicago at 3:25 P.M. daily, with one of the most modern Pullman palace sleeping cars, to run through to Philadelphia via Niagara Falls and the Lehigh Valley route, arriving at Philadelphia at 7 A.M. daily on the second morning. Returning, west-bound, the car leaves Philadelphia daily at 8 P.M., arriving in Chicago on the Pacific express at 8:10 A.M. on the second morning. What makes this route particularly popular is that on the east-bound journey a stop-over at Niagara Falls of seven hours is allowed, and on the west-bound journey a stop-over of four hours, giving passengers ample time to visit the Falls. However, passengers not desiring to lay over at the Falls on the east-bound journey may change at Niagara Falls, taking a Pullman parlor and buffet car, leaving the Falls at 8:30 A.M., arriving in Philadelphia at 10:49 P.M.

THE CHICAGO AND DENVER EXPRESS.—Commencing Sunday, October 28, the only exclusive through Pullman Car Line from Chicago to Denver, via Council Bluffs and Omaha, will be established over the Chicago, Milwaukee & St. Paul and Union Pacific railways, on the following time schedule:

Leave Chicago daily.....	10:40 P.M.
Arrive Council Bluffs.....	6:50 P.M.
Arrive Omaha.....	7:05 P.M.
Leave Omaha.....	8:00 P.M.
Arrive Denver (second day).....	5:25 P.M.

This train makes direct connection with all trains from the east, arriving in Chicago at night. Sleeping Car fare, \$6.00. Excursion Tickets to all Colorado points now on sale. For tickets and sleeping-car reservations apply at City Ticket Offices, 63 Clark street, Grand Pacific Hotel; Palmer House and Union Passenger Station, Canal and Adams streets; or address F. A. Miller, Ass't Gen'l Passenger Agent, 63 Clark St., Chicago, Ill.

Synopsis of Building News.

Buffalo, N. Y.—Commissioner of Public Buildings, O'Connor, has prepared plans for a municipal building for the city, to be three-stories in height, with a frontage of 193 feet; brick and stone, and to be a fireproof construction; not let yet.

Louis Alderman will erect on A avenue a store building, 31 by 32 feet. Mrs. B. McNamara will also erect a store building on Clinton avenue, 22 by 32 feet.

Architect F. W. Caulkins has prepared plans for a five-story business block, 51 by 140 feet, to be erected on Main street; pressed brick, improvements modern style; cost \$33,000.

Architect John G. Balsarn has prepared plans for James Powers for a three-story building, 70 by 60 feet, to be erected on Richmond avenue; to cost \$30,000.

Architect W. W. Carlin has prepared plans for E. C. Paul for a double dwelling two and a half stories, to be erected on Maryland street; modern improvements; cost \$5,000; contract let.

Architects Green & Wicks have prepared plans for a chapel for the First Presbyterian Church Society, 77 by 39 feet; cost \$35,000. Later the society will build a \$110,000 church.

Architects Clark & Loetz have prepared plans for a Polish Church, to be erected by the Black Rock Society, 50 by 150 feet; cost \$18,500; Charles Berrick, contractor. Later the society will build a \$100,000 church.

The Real Estate Exchange is reported by H. S. Pickett as having plans prepared for an exchange building to cost a considerable sum of money. No site has yet been selected.

The town of Grand Island has bonded itself to build a \$150,000 draw-bridge across the Niagara river at that point.

Architect E. A. Kent: For the Miller estate, a four-story store, hall and office building, 91 by 84 feet; brick and stone; provided with modern improvements; frescoing, marble work, tiling, elevators, pneumatic bells, fire-escapes, etc.; cost \$32,000. For W. L. Hodgman, residence; cost \$4,000. For A. M. Jones, Jamestown, N. Y., six dwellings; also alterations and addition to residence.

Architect Henry Smith: For Robert Dempster, residence, 30 by 58 feet; two stories; brick and stone; plate and stained glass; hardwood finish; annunciators; electric work; mantels; grates, improved heat; bathroom, kitchen and laundry outfitings and all modern improvements; cost \$7,000.

Architect R. W. Dunbar: For Bennett & Schell, a 1,500,000-bushel elevator. Contracts not yet let.

Architects R. A. & L. Bethune: For Kensington Episcopal Society, church building; cost \$4,000.

Architect Geo. J. Metzger: For C. J. Heinold, business block; three stories; 32 by 100 feet; brick and stone, modern improvements. For Warner Bros. & Co., six-story business block, 61 by 116 feet; brick, with rock-faced stone trimmings; steam heat; passenger and freight elevators, etc.; cost, \$80,000. For Jacob Dold, store and office building, 140 by 200 feet; two stories; brick and stone; metal roof; galvanized

cornice; galvanized iron and iron ornamental work; iron beams and columns; plate glass; hardwood finish; gas fixtures and fittings; improved heat and modern conveniences; cost \$20,000.

Architects C. K. Porter & Son: For Robert Forsyth, brick stable; cost \$6,000. Also for building to be erected on West Side; modern improvements; cost \$3,500.

Chattanooga, Tenn.—Architect Thomas Sully, of New Orleans, has prepared plans for an \$80,000 hotel, to be erected by the Lookout Mountain Co., to be built on the summit of the mountain. The structure is to be built of brick, stone and wood, will contain two hundred rooms, and be provided with all modern hotel conveniences.

Chicago, Ill.—A key to the building interests and what the architects have been doing during the present year, will be found in the aggregate cost attached to the permits issued from January 1 to November 30, viz: \$19,352,500. This sum, while not a great amount, is in excess of the total of the previous year, and shows the healthy, normal growth of the city. Inquiries among the architects predict at least as much activity for the year 1889, and some have their expectations fixed upon a decided increase of construction. It is certain that none of the offices are idle, while no inconsiderable number have very important projects under contemplation or in the preliminary stages.

Architects Furst & Rudolph: For Leopold, Meyer, six-story and basement business building, 61 by 85 feet; brick, stone and iron steam heat, electric lighting, elevators, modern conveniences; cost \$35,000.

Architect L. G. Halberg: For J. L. Cochran, at Edgewater, four two-story dwellings; cost \$6,000 each. For T. Balmer, at same place, residence, modern conveniences; cost \$7,000. For A. T. How, at same place, two-story residence, Indiana pressed brick; slate roof, hardwood finish, furnace heat, and modern conveniences; cost \$6,500. For F. A. Heath, at same place and same character of building; cost \$7,000.

Architect W. G. Barfield: For A. M. Hubbel, three-story flat building, brick and buff Bedford stone; cost \$8,000.

Architect W. D. Cowles: For E. D. Murray, two three-story houses, 32 by 70 feet, first story cutstone, second and third stories pressed brick, with corner tower of same material; cost \$12,000.

Architects Ostling Bros.: For F. H. Mealliff, grain elevator, 48 by 72 feet, altitude 114 feet; wood covered with corrugated iron, capacity 125,000 bushels; cost \$20,000. For John Sullivan, block of flats, 22 by 50 feet; cost \$7,000. For L. Hesselroth, apartment building; cost \$16,000.

Architect Geo. O. Gurnsey: For Frank Brody, four two-story and basement brick dwellings; modern improvements and conveniences; cost \$20,000.

Architects Flanders & Zimmerman: For Judge J. Altgeld, seven-story business block; brick, iron, steam, passenger and freight elevators; cost \$50,000. For Wm. Crilly, three-story hall and flat building, 63 by 85 feet, pressed brick, stone trimmings, steam heat; cost \$20,000.

Architects Greisser & Maritzen: For Gottfried Brewing Co., boiler room and smoke stack, smoke stack to be 30 by 30 feet at base, 250 feet high, 10 feet across top of stack; cost \$10,000. For the same parties, plans for an elevator to be erected in the spring, 50 by 90 feet, elevation 70 feet, capacity 250,000 bushels; cost about \$75,000. For Mendota Brewing Co., new plant; cost \$45,000. Remodeling brew house for Bartholomew & Roessing; cost \$15,000. Taking bids on a six-story factory building for Jacob Birk, 42 by 70 feet, pressed brick front, stone trimmings, elevator, steam heat, etc.; cost about \$20,000.

Architects Swalm, Bivert & Co.: For Mrs. Susan A. Vogel, at Lake View, a store and apartment building, thirteen houses, 127 by 123 feet, four stories, pressed brick and Bedford stone fronts, electric work and modern conveniences, white pine finish, hot water supplied from engine boiler in the basement; cost \$95,000. For Mr. Jacobs, apartment building, to be erected on LaSalle avenue, 98 by 127 feet, six stories, pressed brick, stone and terra-cotta, steam heat, electric work, and every modern convenience, interior first-class, finished in oil and stain; cost \$150,000. Addition to Fairmount College, Wichita, Kansas, to be known as Carrie Harrison Lodge, in honor of the wife of the President-elect, 50 by 60 feet, two stories, attic and basement, rough Bedford stone, in imitation of log cabin, veranda and two porticos, interior divided into twenty rooms, each finished in different wood; parlor and hall will have old-fashioned New England fireplace, hall to be supplied with antique curiosities and memorial windows, live steam heat, to be used as dormitory and study; cost about \$35,000.

Architect W. L. Carrall: For W. R. Wilson, four-story flat building, 25 by 76 feet, façade rock-faced stone, interior pine finish, furnace heat; cost \$11,000.

Architect Wm. Strippelman: For Mrs. R. Fischer, two-story flat building, St. Louis pressed brick and Michigan sandstone; cost \$5,000. For Judge Tuley, two-story club house at Pine Lake, Wis.; cost \$5,000. Warehouse on West Harrison street, brick, stone and iron, steam heat, elevators, etc.; cost \$150,000. Preparing plans for magnificent five-story apartment building, to be erected on the corner of Ashland avenue and Monroe street, area of 47 by 154 feet. It will be divided into twenty-five flats; basement and first story walls will be constructed of rock-faced Bayfield brownstone; remainder will be of Anderson's obsidian brick, with brownstone trimmings; front will be relieved by copper bays; interior, finished in pine and hardwood, will be marked by several new features. No coal will be used; the kitchen, as well as the other rooms, will be warmed by steam. A new gas stove, with a water-back attachment, will be placed in each kitchen for culinary purposes. The entrances to the passenger elevators will be laid in tile, with a wainscoting of marble. The laundry, which will be supplied with steam dryers, will be located in the basement. There will be a direct entrance from the elevator to the dining-room of each flat. The parlor, sitting-room, and dining-rooms will contain large fireplaces, with nicely designed mantels. The fireplaces will be supplied with terra-cotta gas logs. The building will be supplied with hydraulic passenger and freight elevators and a gas engine. Cost is estimated at \$75,000.

Architects Treat & Foltz: For Chas. H. Starkweather, three-story and basement flat building, 25 by 54 feet, pressed brick front, stone basement; cost \$20,000. For Mrs. H. Cutler, two-story, attic and basement residence, exterior clapboards and shingles, interior elaborately finished in hardwoods, hot water heat; cost \$10,000; contracts let. For Dr. Jas. P. Mills, three-story residence, 23 by 50 feet, brownstone front, hardwood finish, hot water heat; cost \$7,500. For General Torrence, to be erected at East Chicago, three-story store, office and theater building, 80 by 100 feet; cost about \$25,000. For same party, at same place, a railway station house, stone and wood construction; cost \$6,000.

Architects West & Foltz: For H. Schroder, dwelling; cost \$10,000.

Architect H. F. Kley: For E. Albrecht, store building; cost \$10,000.

Architect P. H. Ruehe: For Joel H. Graham, factory building; cost \$14,000.

Architects Wilson, Marble & Lamson: For A. H. and E. C. Morton, apartment building, to be erected on Michigan avenue; cost \$75,000.

Architect R. Knorr: For Petor Klein, flat and store building; cost \$9,000.

Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall: The outlook at the present writing is one of encouragement, and both architect and contractor look for a busy season. The projected improvements will be of a substantial character,—business blocks, fine residences, etc., and if the laboring part of the community kill the goose, which is about to lay the golden egg, it will be a great piece of assiduity on their part, as well as a misfortune to all. As far as I can learn, not much attention is paid here to the eight-hour agitation now going the rounds.

Gustave W. Drach is reasonably busy on sketches and plans. He has drawn plans for quite a pretty house for N. Robinson, of Charleston, W. Va., of frame and shingle construction, containing about ten rooms, not including bathrooms or laundry; shingle roof; cost \$4,000.

Emil C. Rueckert has his hands full. He has prepared plans for Mrs. A. Schwind, for a three-story, pressed brick store and flat building. It will be very complete, containing twelve rooms, not including bath, etc.; have tin roof, and cost \$6,000.

John Schneider will build a three-story pressed brick building with stores and flats; pine finish; tin roof, etc.; cost \$6,000. For Chris. Von Seggern, two brick houses of eight rooms each, two and one-half stories high, slate roof, mantels, etc.; cost \$13,000. For John Millet, a two-story frame residence of five rooms, for a flat and store, with shingle roof; cost \$3,500. For Henry Dodi, a two and one-half story brick residence of seven rooms; yellow pine finish; slate roof; cost \$5,400.

S. E. Desjardins has drawn plans for a handsome brick and stone residence, two stories high, and containing twelve rooms, and with slate roof; cost \$9,000.

S. Hannaford & Sons are busy on plans, but the following is the only one ready to report: a large five-story brick warehouse, with iron front and tin roof; cost \$30,000.

The alterations of Trinity Church, Covington, Ky., designed by and carried forward under the able superintendence of Mr. Louis Picket, are completed. The congregation can now boast of one of the most picturesque edifices in Covington. Mr. Picket never does anything by halves. The improvements were of pressed brick with stone trimmings. Mr. Picket also reports a three-story brick residence for Mrs. Mary O'Brien. It will contain twelve rooms and laundry, and cost about \$7,500.

Architect James W. McLaughlin is busily engaged upon the plans for a six-story stone front store building for that large clothing firm—Mabley & Carew. It has Roman-

esque features throughout its architecture, and is designed in the architect's best style. The interior arrangements will be complete, and all the floors well lighted; cost, about \$75,000. For Mrs. Lauretta B. Gibson, Mount Auburn, city, two double houses of twelve rooms each, of brick, with slate roof. These houses are quite picturesque, although plain, and will have all the modern improvements.

Architect A. O. Elzner has prepared plans for a two-and-one-half story frame and shingle house, ten rooms, laundry and bath; cost \$4,000. He has drawn plans, which have been accepted, for the Kentucky Central Railroad, for a station at Covington, Ky. The design is very picturesque, and the building, of pressed brick, with its slate roof, when completed will be a beautiful structure.

Architect S. S. Godley has been reasonably occupied, and reports the following: Alterations and additions to hotel at Harrison, Ohio, consisting of fifteen rooms, including billiard, bar, dining room and kitchen. The building is frame, with tin roof. Alterations and additions to farm house of G. W. Armstrong, at Montgomery, Ohio, adding six rooms. He is also busy on sketches for Julius Freiberg.

Dayton, Ohio.—Architects Williams, Dexter & Potter have prepared plans for a town hall, to cost \$15,000.

Denver, Col.—Architects Varian & Sterner: For F. A. Miller, stone residence; all modern improvements; cost \$30,000. For A. J. Vivian, brick block; cost \$20,000. For same party, four brick dwellings; cost \$18,000. For T. P. Dunbar, stone dwelling, modern improvements; cost \$20,000. For D. Polk, brick business block; cost \$12,000. For E. T. Aulls, brick dwelling; cost \$8,000.

Architect F. E. Edbrooke & Co.: For C. M. Kittridge, four-story brick block; cost \$75,000. For projected Masonic Temple; five-stories; stone; cost \$200,000. For Chas. Dwelle, three-story brick block; cost \$30,000.

The following are among the permits, ranging from \$3,000 and upward, that have been taken out during the past month: J. H. Green, one-and-one-half-story brick dwelling, 30 by 42 feet; cost \$4,000. N. M. Tabor, three one-story brick dwellings, 22 by 42 feet each; cost \$5,400. W. Ziegler, two-story brick dwelling, 50 by 60 feet; cost \$3,800. A. J. Stoke, four two-story brick dwellings, 30 by 30 feet each; cost \$15,000. Borresen Bros., one-story brick business building, 50 by 125 feet; cost \$6,000. W. D. Suydam, two one-and-one-half-story brick dwellings, 22½ by 44 feet; cost \$4,000. C. M. Hobbs, two one-and-one-half-story brick dwellings, 25 by 40 feet each; cost \$8,000. M. J. Huswell, one-and-one-half-story brick dwelling, 28 by 33 feet; cost \$3,000. Z. E. Dewey, one-and-one-half-story brick dwelling, 30 by 50 feet; cost \$5,500. A. L. O. Okerstrom, two one-and-one-half-story dwellings; brick, 26 by 48 feet each; cost \$6,000. C. H. Rosenfel, three one-story brick dwellings, 22 by 48 feet; cost \$7,000. M. Gilpin, two-story brick residence, 26 by 50 feet; cost \$7,500.

Detroit, Mich.—Architect A. E. French has prepared plans for a brick and stone schoolhouse, to be built by the Board of Education of Litchfield, Mich.; cost \$8,000.

Architects Donaldson & Mier: For Dry Dock Sheet Metal Works, metal work building, 100 by 100 feet, three stories, common brick and stone, composition roof, architectural and galvanized ironwork, iron beams, columns and shutters, metal skylights, freight elevators, steam heat, wire railings and window guards, gas fixtures, etc.; cost \$8,000.

Architects Hess & Roseman: For city police court building, three stories, 80 by 90 feet, pressed and common brick, with ornamental brick and stone trimmings, fireproofing, galvanized iron cornice and skylights, wire lathing, slate roof, galvanized and corrugated ironwork, iron beams and columns, iron cells, dumb waiters, plate, stained and common glass, red oak finish, wood mantels, grates, etc.; cost \$50,000.

Superintendent C. F. Purdie, of the Michigan Wire and Iron Works, has had plans prepared for a factory, to be erected by the company, 50 by 250 feet, two stories, brick and stone, galvanized and architectural ironwork, skylights, composition roof, electric lighting, steam freight elevators, office fixtures, writing desks, etc., and machinery plant; cost about \$12,000.

The Michigan Fishing and Shooting Association is having competitive plans for a club house, to be 60 by 80 feet, two stories high, built of frame with shingle roof, skylights, galvanized ironwork, billiard tables, carpets, dumb waiters, electric lighting, gas fixtures, plate, stained and ornamental glass, hardwood finish, steam heat, grates, mantels, pneumatic bells, refrigerators, bath and kitchen outfits, and modern improvements and conveniences; cost about \$8,000.

El Paso, Tex.—The building outlook for the coming season is very encouraging. Architect Geo. E. King reports: Addition to the Grand Central, three stories and basement, 60 by 90 feet; cost \$30,000. For Mrs. Crosley, block of two-story stores, 57 by 65 feet; cost \$6,500. For Mrs. M. L. Kyle, two-story and cellar residence, 47 by 40 feet; cost \$6,000. For P. B. Watson, two two-story dwellings, 26 by 66 feet; cost \$8,000. The first will be begun this month; the latter is just finished, and the others are under way. Geo. Paul is the contractor.

Fort Dodge, Iowa.—Architect Chas. B. Heffler: For Jno. Doud, Jr., three-story business block, 100 by 25 feet, pressed and common brick with stone trimmings, iron store fronts, metal roof, galvanized iron cornice, plate glass, hardwood finish, gas fixtures, etc.; cost \$6,000. Contemplates preparing plans for two other similar buildings for same party, to be erected in the spring.

Fort Wayne, Ind.—Architects Wing & Mahurin: For D. B. Klugsston, Columbia City, Ind., two-story store and bank building, 44 by 88 feet; pressed and common brick; tin roof; gas; electric lighting; plate glass; hardwood finish; safes and vaults; bank and office fixtures; cost \$6,000. For A. B. Nickey, Cherubusco, Ind., frame residence; shingle roof; stained, plate and common glass; frescoing and wall papering; grates, mantels, kitchen, laundry and bathroom fixtures, and all modern conveniences; cost \$5,000. For city of Fort Wayne, addition to pumping station, 20 by 60 feet; pressed brick and stone; metal roof; steam heat, etc.; to be built next season.

Fredonia, N. Y.—Architects Curtis & Archer: For Fayetteville, N. Y., school house, brick, slate and tin roof, iron stairs, cresting and shutters; cost \$20,000. For Belmont, N. Y., brick school house, slate roof; cost \$8,000. For Little Cailey, N. Y., brick school house, slate roof; cost \$6,000. For Greensburgh, Pa., Protestant Episcopal church building, 35 by 800 feet, brick and stone, slate roof, furnace, pipe organ; cost \$20,000. For E. M. Danforth, Olean, N. Y., frame residence; cost \$10,000. For G. W. Galbraith, Erie, Pa., brick residence; cost \$6,000. For Bradford, Pa., Presbyterian church building, frame auditorium; cost \$8,000. For T. J. Melville, Bradford, Pa., frame residence; cost \$5,000.

Kansas City, Mo.—Every advantage is taken of the exceptionally fine weather to get the buildings that are under way under cover, and builders are beginning to curtail their work in anticipation of the more inclement season. A disadvantage contractors will labor under in inside work this winter is the shortage of material, as the stocks in those commodities are growing lighter and prices are advancing proportionately. The following is a partial exhibit of what is going on with the architects:

Architect J. A. Russell: For T. L. Hall, five four-story houses, 49 by 112 feet, common brick, with ornamental brick and terra-cotta trimmings, American tiling, slate roof, galvanized iron cornice, architectural and galvanized iron work, plate, stained and ornamental glass, frescoing, oak and pine finish, marble work and tiling, slate and wood mantels, iron and tiled grates, steam heat, ranges, pneumatic bells, hot and cold water, elevators, electrical work and all modern conveniences; cost \$32,000.

Architect E. S. Hill: For D. J. McMillen, two-story business block, 45 by 81 feet, pressed and ornamental brick, galvanized iron work, steam heat, wood and slate mantels, hardwood finish, etc.; cost \$10,000.

Architect E. P. Brink: For T. B. Tomb, business block, brick and stone, galvanized iron cornice, prismatic sidewalks, hardwood finish, plate glass windows, steam heat, etc.; cost \$10,000.

Architect M. J. Scholer: For E. C. Hamler, two residence buildings, three and one-half stories high, 64 by 52 feet, pressed brick, with ornamental and terra-cotta trimmings, galvanized cornice and iron work, oak and ash finish, wood and marble mantels, plate, stained and ornamental glass, iron fence and all modern improvements; cost \$18,000. For E. Harris, two two-story residences, brick, with terra-cotta trimmings, slate roof, galvanized cornice, plate and stained glass, hardwood finish, wood mantels, steam heat, ranges, hot and cold water and all other modern conveniences; cost \$15,000.

Architect A. B. Cross: For Judge H. Lynch, block of three dwellings, 67 by 47 feet; pressed brick, with Warrensburg stone trimmings; slate roof; stone steps and sidewalk; inside blinds; electrical work; mantels; grates; bathrooms; and all modern conveniences; cost \$10,000. For W. H. Caffery, three Queen Anne cottages; brick and frame; shingle roofs; copper faced bays; iron crestings; plate glass; bathroom, kitchen and laundry outfits, and first-class modern improvements; cost \$12,000. For Geo. G. Kellogg, five-story theater, hotel and office building, 110 by 118 feet; common brick, Warrensburg stone and marble; have fireproofing throughout; stone cornice; iron beams and columns; iron stone fronts; gravel roof; composition sidewalks; galvanized iron

[Continued on page XVI.]

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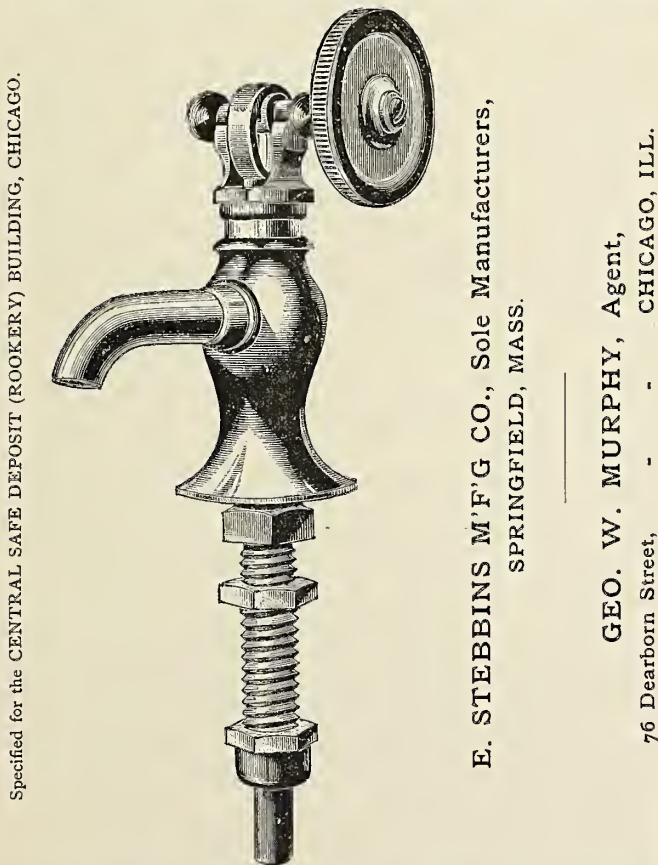
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[Continued from page 84.]

skylights; annunciators; bathroom outfits; electric bells; boilers; frescoing; electric lighting, electric work and gas lighting; two freight and passenger elevators; engines, carpets, fire escapes and hose; furniture; gas fixtures and fitting; plate, stained and common glass, cathedral, cut and beveled glass; coal grates; steam heat; hardwood finish; paneling and wainscoting; kitchen fixtures, laundry fixtures and tubs; slate and marble mantels, marble work and wainscoting, marble floors and stairs; office fixtures, railings and desks; plumbing; prismatic sidewalk lights; ranges, refrigerators; burglar or fireproof safes, vaults and deposit boxes; scenery for theater; opera chairs; speaking tubes; steam pipe covering; store fixtures, counters and shelving; American tiling; wire railings and elevator guards, wire lathing, and every first-class modern improvement and convenience, it will cost about \$150,000, and none of the contracts have been let. Work will not be commenced until next summer.

Architect H. Probst: For A. Moynihan, four four-story dwellings, 164 by 40 feet; pressed and common brick; galvanized iron cornice; composition roof; cut and plate glass; wood and slate mantels; elevators; steam heat, etc.; cost \$56,000. For the same party, ten three-story residences, 146 by 24 feet; pressed and common brick, with terra-cotta trimmings; plate glass; wood and slate mantels; hardwood finish; cost \$120,000.

Architect J. O. Hogg: For Jas. Downey, four two-story residences, 54 by 30 feet; brick, with stone trimmings; gravel roof; modern conveniences; cost \$4,500 each.

Architects James & James: For H. C. Murdock, two two-story store and flat buildings, 74 by 60 feet; pressed and common brick; galvanized iron work; slate roofs; wood and slate mantels; steam heat; plate glass; grates, etc.; yellow pine finish; cost \$12,000.

Architect Max Scholer: For A. W. Brewerton, four two-story residences, 112 by 56 feet; pressed and common brick, with stone trimmings; slate and tin roof; galvanized iron cornice; gas fixtures; plate and stained glass; grate, stoves and laundry fixtures; wood, slate and marble mantels; electric work and all modern improvements; cost \$24,000.

Architect J. C. Sutherland: For Mrs. Mary L. Simpson, two three-story dwellings, 41 by 51 feet each; pressed and common brick, with ornamental and enameled brick and terra-cotta trimmings; slate roof; galvanized iron cornice; plate, stained and ornamental glass; frescoing; oak and redwood finish; wood, slate and marble mantels; bath and laundry rooms; hot and cold water; steam heat; electric work, etc.; cost about \$20,000. For the same, three-story dwelling, in Renaissance style; brick, with stone trimmings; iron verandas; bay windows; slate roof; hardwood finish; bath, kitchen and laundry outfits; steam heat; electric work, etc.; cost \$8,000.

Architect F. J. Hart: For F. Campbell, double two-story dwelling; pressed and common brick, with Lake Superior stone trimmings; slate roof; galvanized cornice; galvanized iron skylights; inside blinds; hand power elevator; plate and common glass; wood, slate and marble mantels; hardwood finish; plumbing; ranges, grates, steam heat, electric work and speaking tubes; gas, bath, kitchen and laundry fixtures; iron fence; stone sidewalks, etc.; cost \$10,000. For J. M. Linden and F. C. Fales, twelve three-story residences, 49 by 62 feet each; pressed and common brick, with ornamental and enameled brick trimmings, and terra-cotta work; galvanized cornice; slate roof; plate, stained and ornamental glass; frescoing; wood and slate mantels; grates; furnace; oak and ash finish; tiling; gas, bath and laundry fixtures, etc., cost about \$78,000.

Architects Mathews & Saunders: For M. W. Halsey, block of three three-story dwellings, 112 by 56 feet; pressed and common brick, with stone trimmings; slate and tin roof; galvanized cornice; copper bays; inside blinds; gas fixtures; plate, stained and common glass; wood, slate and marble mantels; oak and yellow pine finish; dumb waiters; electric work; speaking tubes; bath, kitchen and laundry outfits, and all modern conveniences; cost \$24,000.

Architect A. Van Brunt: For Mrs. E. M. Boulton, two-story residence; brick, with terra-cotta trimmings and ornamental work; slate roof; plate glass; electric work and gas fixtures; bath, kitchen and laundry outfit; improved heating, and all latest improvements and conveniences; cost \$5,000.

The following are among the recent permits taken out, ranging from \$3,000 and upward: P. H. McCrary, double brick residence, 36 by 37 feet; cost \$3,000. Same party, two double frame residences, 36 by 37 feet each; cost \$5,600. Malcom Bliss, double brick residence, 38 by 38 feet; cost \$8,000. Mary L. Simpson, two double brick residences, 41 by 45 feet each; cost \$20,000. Same party, double brick residence, 39 by 33 feet; cost \$8,000. J. F. M. Stine, four two-story frame residences, 18 by 34 feet each; cost \$6,000. M. E. Tomlinson, two-story frame residence, 23 by 42 feet; cost \$3,000. W. Wischhusen, four one-story brick business houses, 75 by 50 feet; cost \$3,500. F. A. Hornbeck, three-story double brick business house, 45 by 55 feet; cost \$10,000. F. Campbell, two-story double brick residence, 42 by 60 feet; cost \$10,000. M. W. Trust Co., seven two-story business blocks, 116 by 18 feet; cost \$6,500. M. W. Palsey, block of three-story residences; cost \$15,000. A. W. Brewerton, four two-story residences, brick; cost \$24,000. W. H. Caffery, block of three two-story frame buildings; cost \$12,000. Mrs. E. Boulton, two-story brick residence, 32 by 52 feet; cost \$5,000. A. E. Eastland, two two-story brick dwellings, 58 by 40 feet; cost \$8,000. F. A. Hornbeck, three-story business house, 45 by 55 feet; cost \$10,000. Frank Campbell, two-story residence; cost \$6,500. M. W. Halsey, three-story residence, 62 by 40 feet; cost \$15,000. A. W. Brewerton, four two-story dwellings, 23 by 49 feet each; cost \$24,000. W. H. Caffery, two-story building, 70 by 42 feet; cost \$12,000. G. W. Bush, three-story brick block, 50 by 75 feet; cost \$16,000.

Little Rock, Ark.—Architect T. Harding: For Wolk Bros., remodeling and addition to three-story block of brick stores; cost \$8,000. For Dr. Watkins, one-story addition to two-story block of brick stores; cost \$7,000. For Herman Kahn, block of two-story brick stores; cost \$6,000. For Mt. Nebo Hotel Co., Mt. Nebo, Ark., three-story frame hotel building; cost \$9,000.

B. J. Bartlett, architect: For L. K. Madelbann, two-story frame dwelling; cost \$2,200. For N. O. Nelson, Malvern, Ark., two-story frame dwelling; cost \$2,500. For J. I. Hannaford, Batesville, Ark., two-story frame dwelling; cost \$3,500.

Los Angeles, Cal.—Building during the year has been very active and is still so. The outlook for the coming year is for a more flattering season than the present has been. The prospect is that over \$2,000,000 worth of new construction will be made. The following is a partial exhibit of what the architects have been doing:

Architects Kyser, Morgan & Wells: Orphans Home building, three stories, brick; cost \$43,000. For Dr. Edgar, three-story brick block; cost \$26,000. Krutz & Barton

block; cost \$25,000. Gates Building; cost \$22,500. O'Neil Building; cost \$11,500. Avery Little Building; cost \$10,000. Merriman Building; cost \$10,000. For F. Sabachi, residence; cost \$22,500. For Dr. Graves, residence; cost \$15,000. For Mrs. Tropt, residence; cost \$5,400.

Architects Capitan & Burton: Brewery buildings for the Philadelphia Brewing Company; cost \$125,000. For McDonald & Zellner, two flat buildings; cost \$8,500.

Architects Corlett, Eisen & Cuthbertson: For Mrs. I. Severence, residence; cost \$30,000.

Architect E. A. Coxhead: For First Lutheran Church Society, church building; cost \$14,000. For All Saints' Church Society of Pasadena, church building; cost \$26,000.

Architect W. O. Mathews: For John Keiffer, three-story brick block; cost \$18,000. For Dr. Wells, three-story building; cost \$8,000.

Architect J. N. Preston: For Andrew Glassell, residence; cost \$2,500.

Architect R. B. Young: For Winona Hotel Company, hotel; cost \$5,000. Addition to Figuerra hotel; cost \$6,000. For G. H. Pinney, brick building; cost \$10,000.

For Mr. Faulk, brick store building; cost \$4,500. For Geo. King, residence; cost \$20,000. For G. Gephard, brick building; cost \$300,000.

Architect Chas. W. Davis: For J. M. Ward, residence; cost \$6,000. For Wm. Summers, residence; cost \$12,000.

Architect C. E. Apponyi: For David Jones, hotel and theater building; cost \$250,000.

Milwaukee, Wis.—Architect Jas. Douglas has prepared plans for Geo. L. Wiley, for a summer cottage at Oconomowoc, Wis., to be 30 by 50 feet, two stories and attic, frame, with shingle roof, bathroom outfit, gas machine and gas fixtures, electric work, plate and stained glass, kitchen and laundry outfits, mantels, speaking tubes, ventilators and all modern conveniences; cost \$4,000.

Minneapolis, Minn.—Architects Orff Bros: For A. K. Taylor, brick tenement building; cost \$4,200. For E. F. Webster, similar structure; cost \$35,000.

Architects Long & Kees: Eight-story addition to the Corn Exchange, also two-story frame residence; cost \$2,500.

Portland, Ore.—Architect Geo. Marshall: For Max, Vogt & Co., The Dalles, Ore., three-story and basement, 150 by 100 feet, brick and stone; cost \$50,000. For Margaretta Marshall, residence; cost \$10,000.

Seattle, W. T.—Architect W. E. Brown reports: The following list of buildings comprise a small portion only of those now in the hands of architects in this city: Yesler Block, brick; cost \$50,000; Colonial Block, wood; cost \$14,000; Toklas & Singleman Block, brick; cost \$75,000; Mrs. Stacy, residence; cost \$14,000; F. E. Sander, residence; cost \$16,000; Arthur Denny, four residences; cost \$12,000; J. M. Atkinson, residence; cost \$7,000; Edward Burwell, residence; cost \$4,000; D. E. Denny, four residences; cost \$9,000; Dr. Weed, office building; cost \$8,000; L. H. Griffith, boarding house; cost \$12,000; J. R. Lewis, brick store; cost \$10,000; school district No. 1, two brick and stone school buildings; cost \$165,000; Puget Sound Improvement Co., Boston Block; cost \$125,000; Bradlee, Winslow & Wetherell, architects, Boston; W. C. Squire, brick block; cost \$30,000; H. Steinman, architect; Moses Korn, brick block; cost \$20,000; Moses Korn, architect. In addition to the above, there are fully eight hundred residences under way.

Sioux City, Ia.—Architect G. C. Baldwin: For Major Cheney, three dwellings, to be provided with all modern conveniences, wood mantels, bath and laundry fixtures, electric incandescent lighting, hot water heat, plate and stained glass, iron fence, iron fountain, etc.; cost \$15,000.

St. Louis, Mo.—Architects J. B. Lindsley & Son: For J. H. Smith, two-story seven-room house; pressed and molded brick with stone trimmings; brick and gravel roof; galvanized iron cornice; marble mantels, stained and plate glass, grates, electric bells; white pine finish; cost \$7,000. For M. K. & T. Real Estate and Trust Co., two-story ten-room dwelling, 40 by 46 feet; with tower and pinnacle; first story brick, second story shingles; brownstone trimmings; gable roof, shingled; ornamental glass, wood mantels, electric work, bath, laundry, hardwood finish; cost \$7,000. For same party, ten-room two-story dwelling, 34 by 58 feet; frame; shingled gable, wood cornice, wood mantels, laundry, bath, wood mantels, hardwood finish, electric bells and all modern conveniences; cost \$7,000.

Architect T. F. Marley: For Mrs. Brolaski, two-story dwelling, 30 by 45 feet, pressed and molded brick, with cutstone trimmings; second story slate; wood and copper cornice; baths, furnace, grates, stained and ornamental glass, hardwood finish, electric work, and all modern improvements; cost \$5,000.

Architect C. C. Hellmers, Jr.: For L. Stumpf, two-story and mansard flats, 44 by 74 feet, pressed and molded brick, with cutstone trimmings, slate and composition roof, wood cornice, wood and slate mantels, hardwood finish, stained and ornamental glass, elevator, electric bell, and modern conveniences; cost \$10,000.

Architect B. M. Weber: For St. Louis Railway Co., boiler and engine room, 22 by 48 feet, brick, with cutstone trimmings, composition roof, galvanized cornice; cost \$5,000.

Architect H. Maack: For Henry Schreich, two-story residence, brick, with cutstone trimmings, composition roof, galvanized cornice, modern improvements; cost \$4,000.

Architect G. W. Heimburger: For Mary E. Libby, two-story and attic dwelling, 30 by 40 feet, frame, wood and galvanized cornice, hardwood and white pine finish, laundry, bath, furnace, stained and ornamental glass, electric work, speaking tubes, etc.; cost \$5,000.

Architect Charles K. Ramsey has completed plans for a contemplated building by D. M. Houser, to cost \$150,000.

Architect W. P. Gains has prepared plans for four modern residence buildings to be built by P. W. Haslett; cost \$30,000.

Architect W. A. Swazey: For H. Dunning, two-story brick dwelling; cost \$9,000.

St. Paul, Minn.—Architect C. B. Seaton has prepared plans for remodeling the McQuillan Block for the Ancient Order of United Workmen. Steam heat, hardwood finish, society furniture and modern improvements.

Wm. C. and Henry Edincott have had plans prepared for an extensive six-story modern building, to be built of brick and stone; to cost about \$250,000.

Architects Wilcox & Johnston: residences for C. M. Power and W. G. White; cost \$6,000 to \$10,000.

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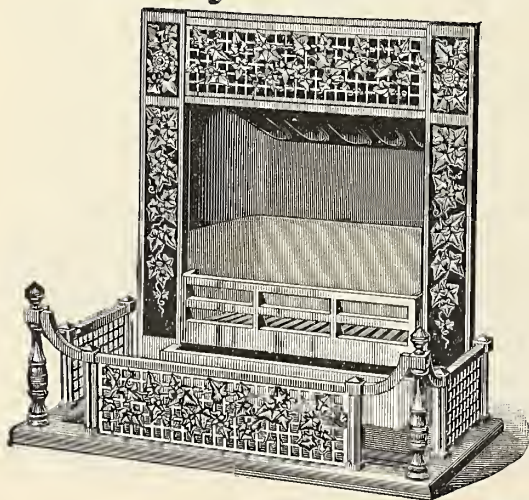
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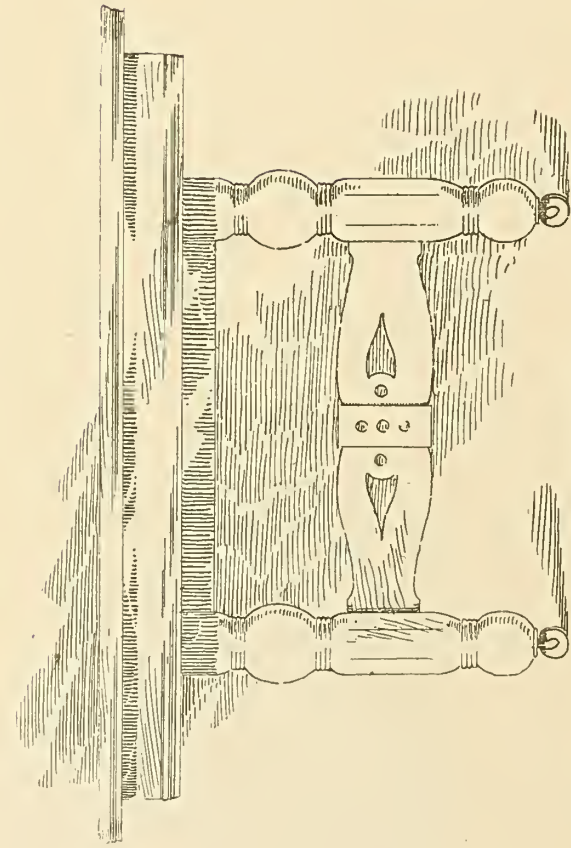
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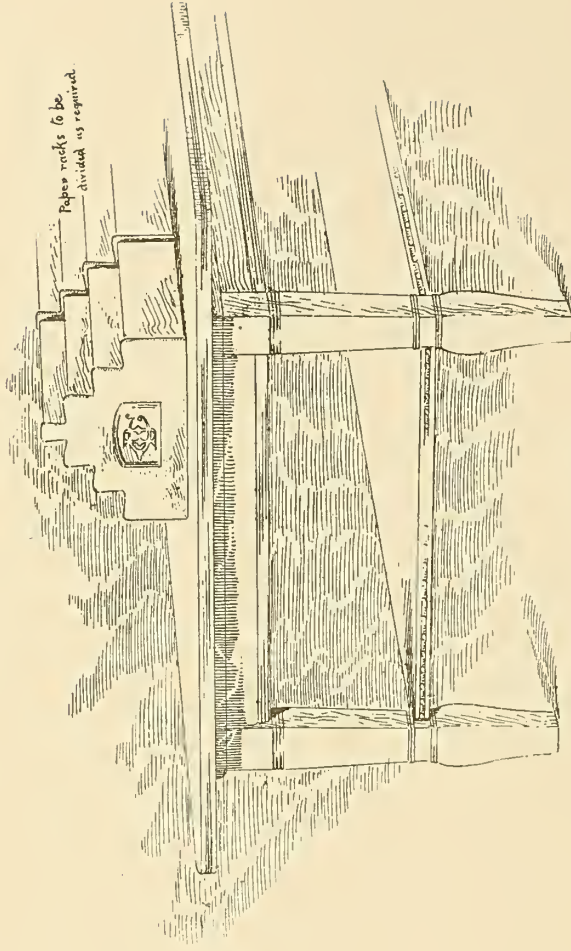
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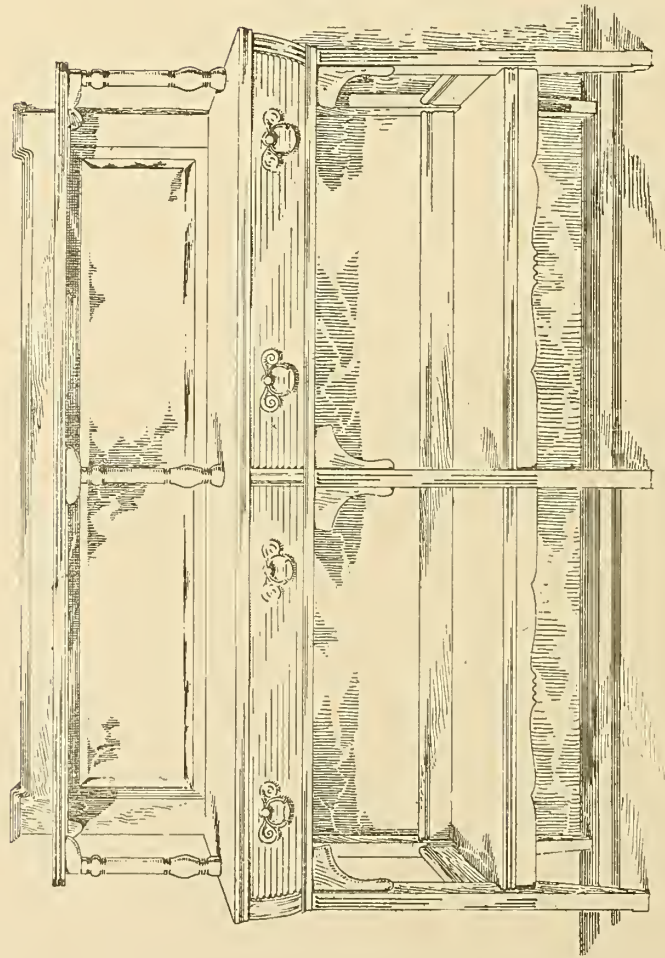


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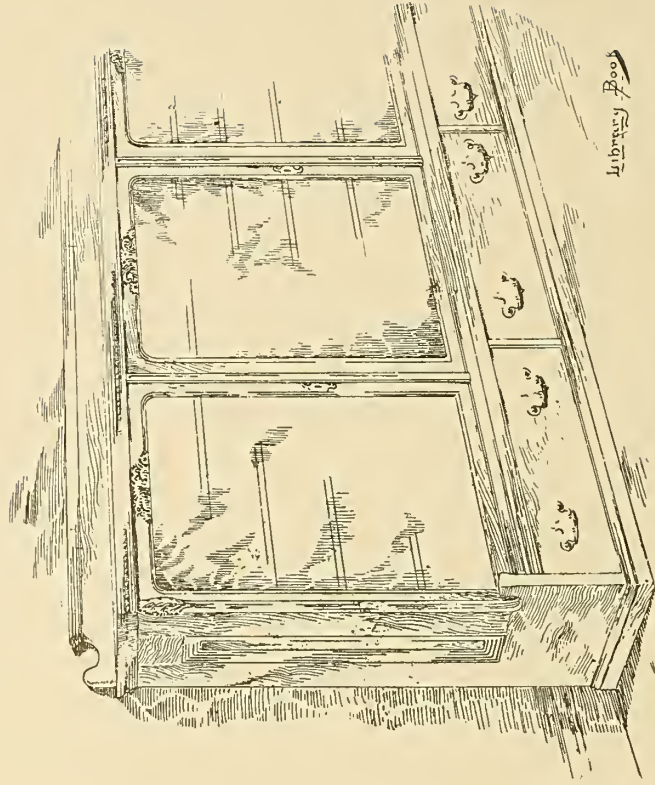


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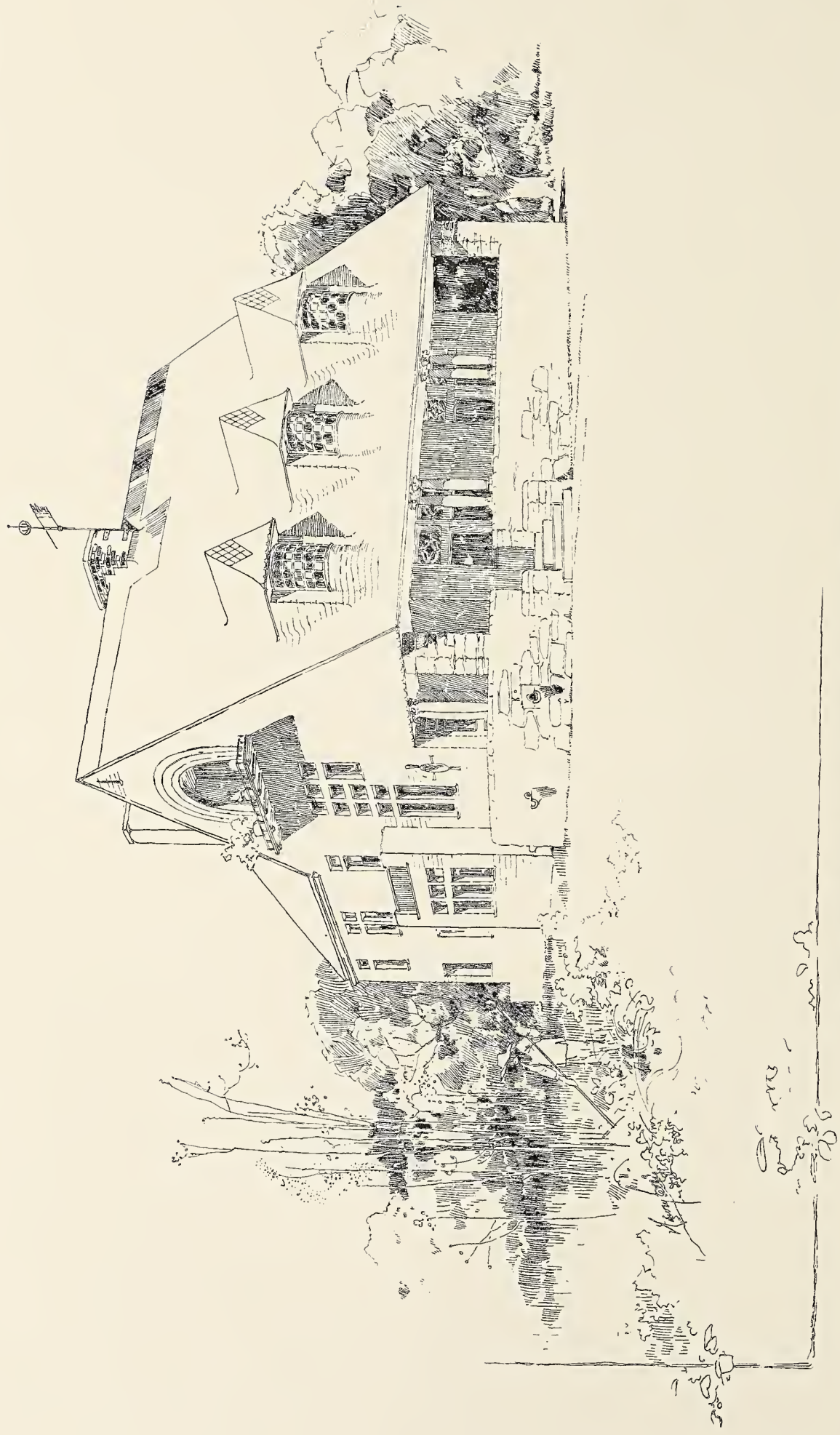
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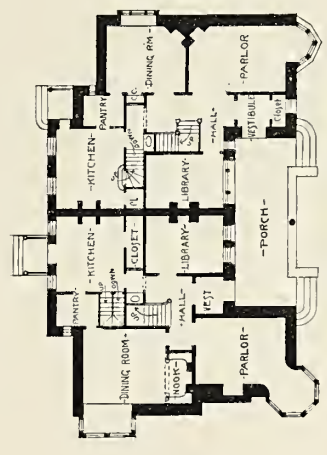
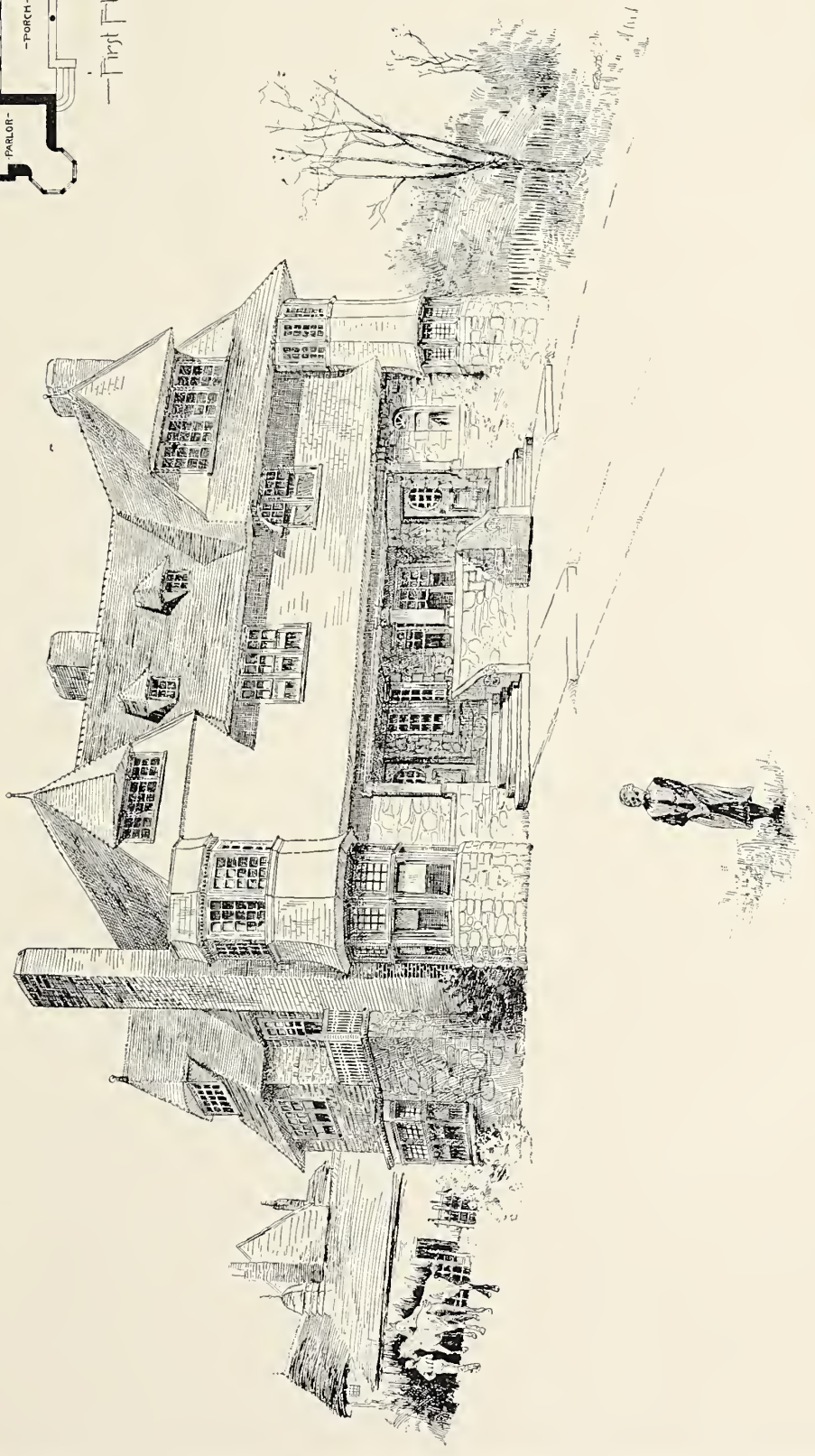
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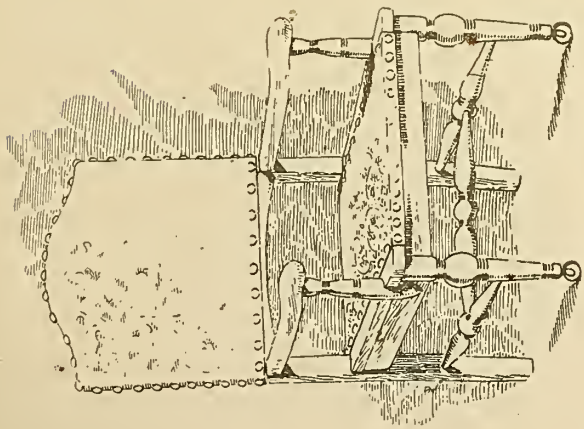
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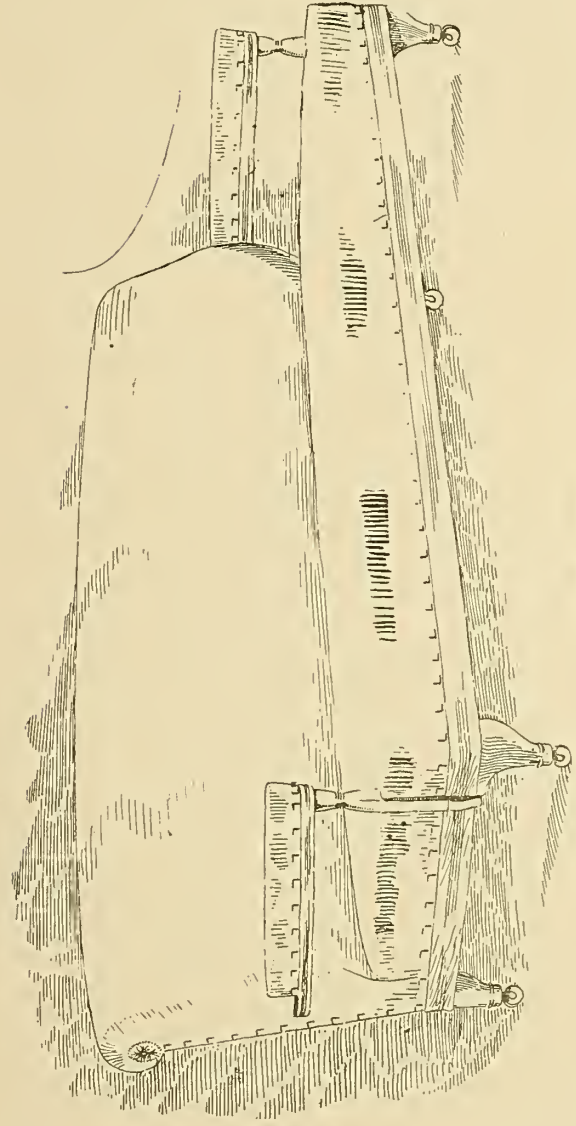
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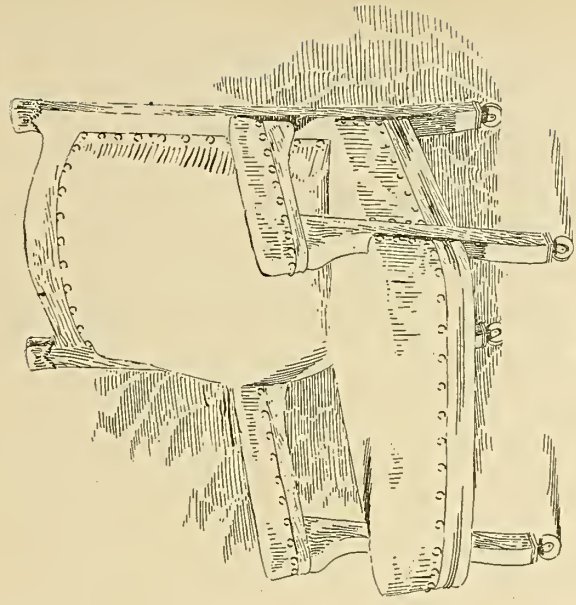
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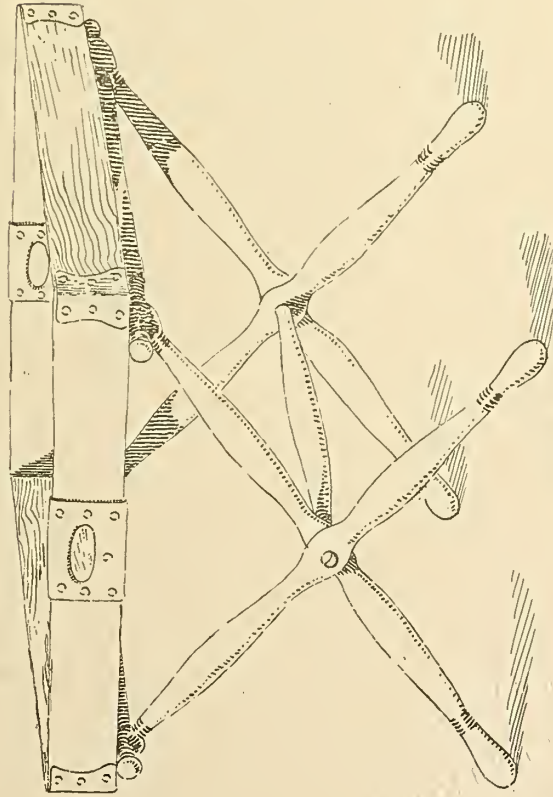
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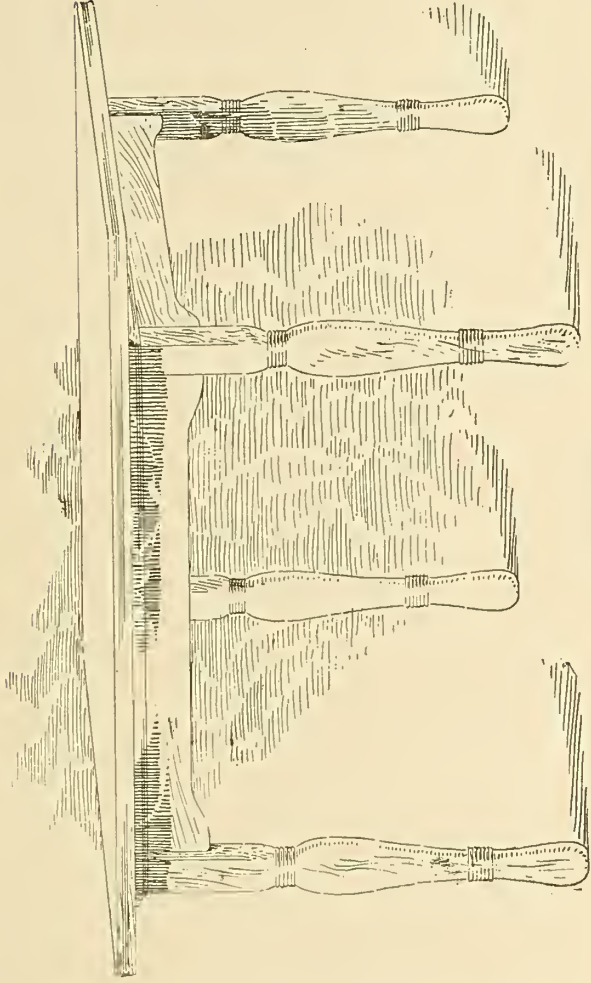
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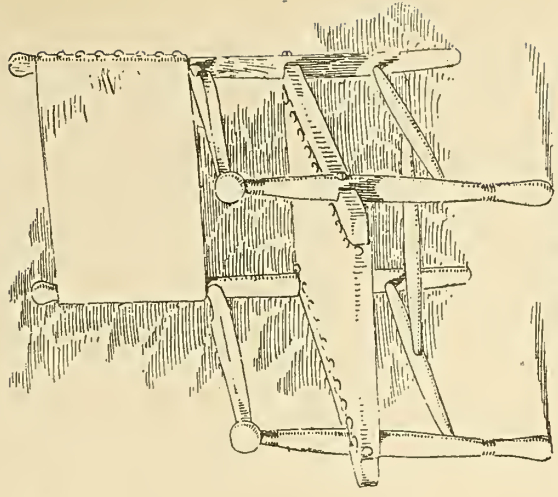
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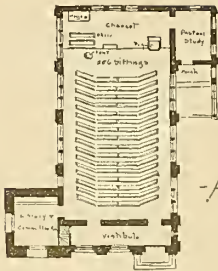
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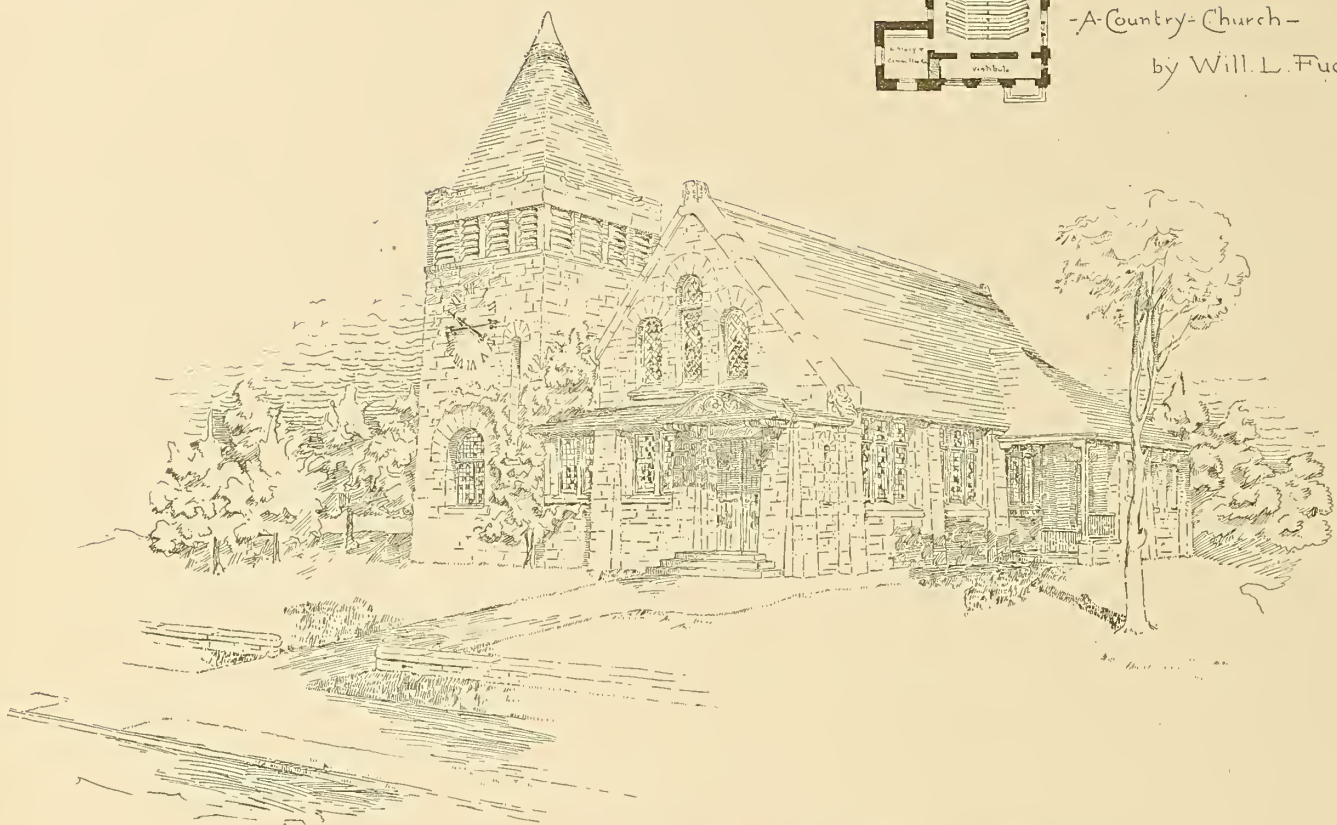
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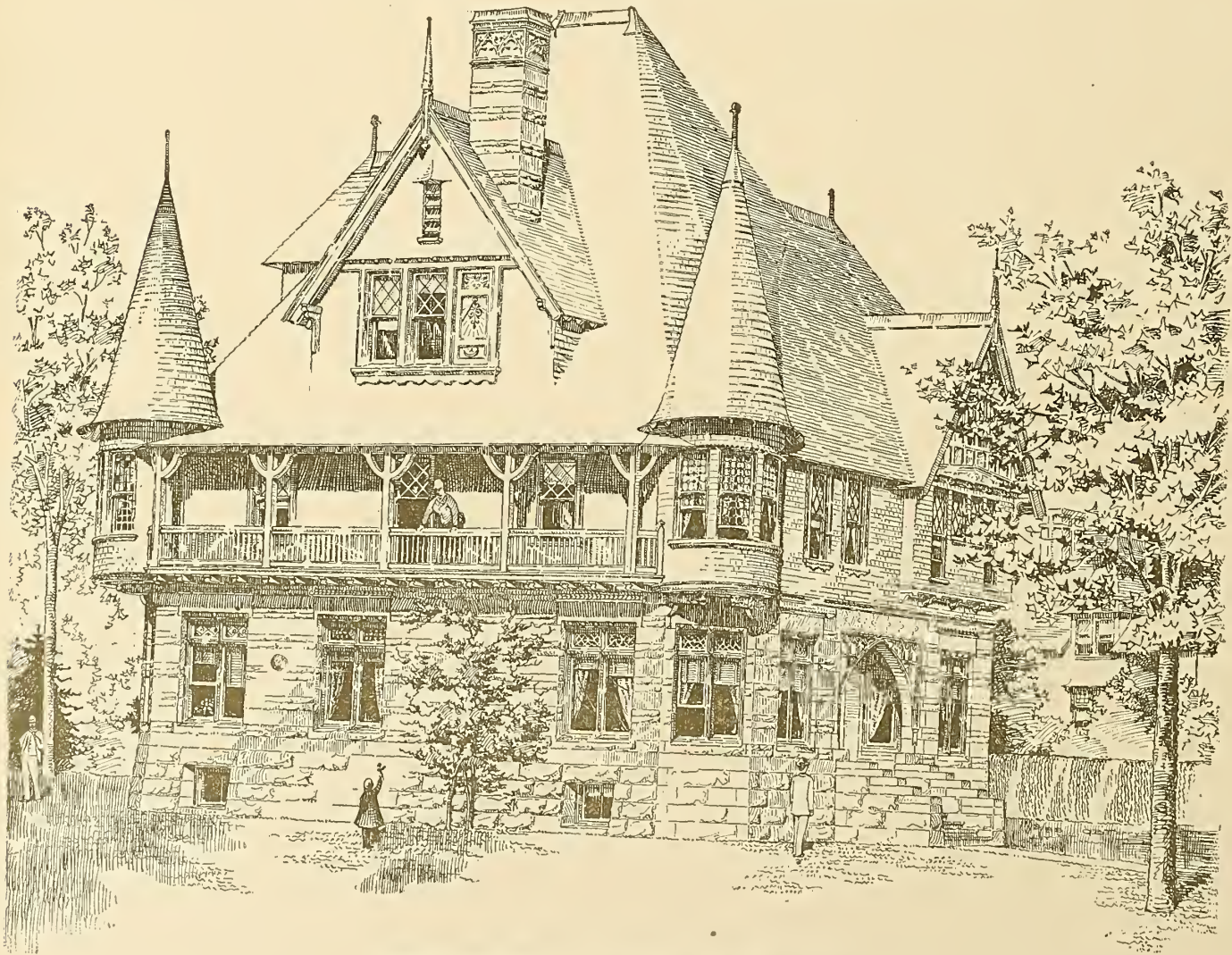
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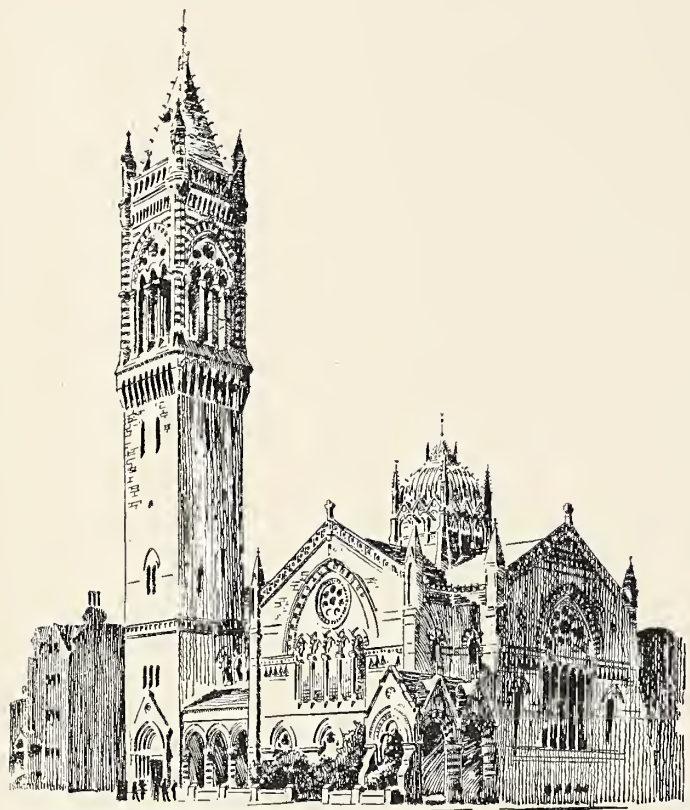
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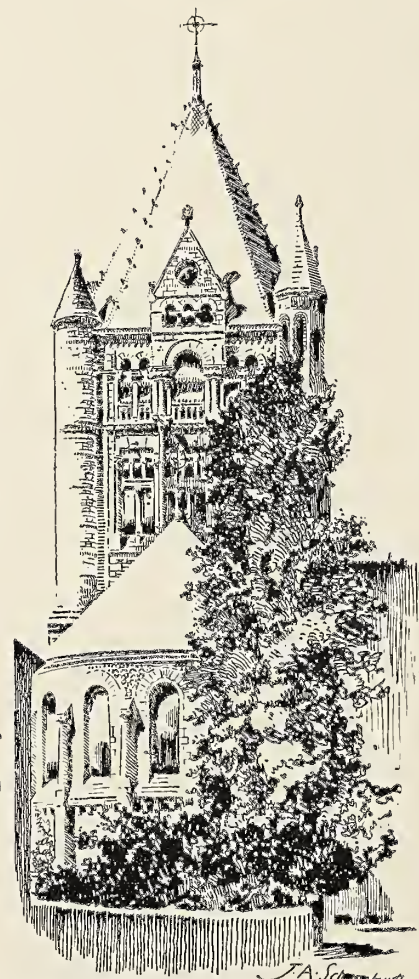
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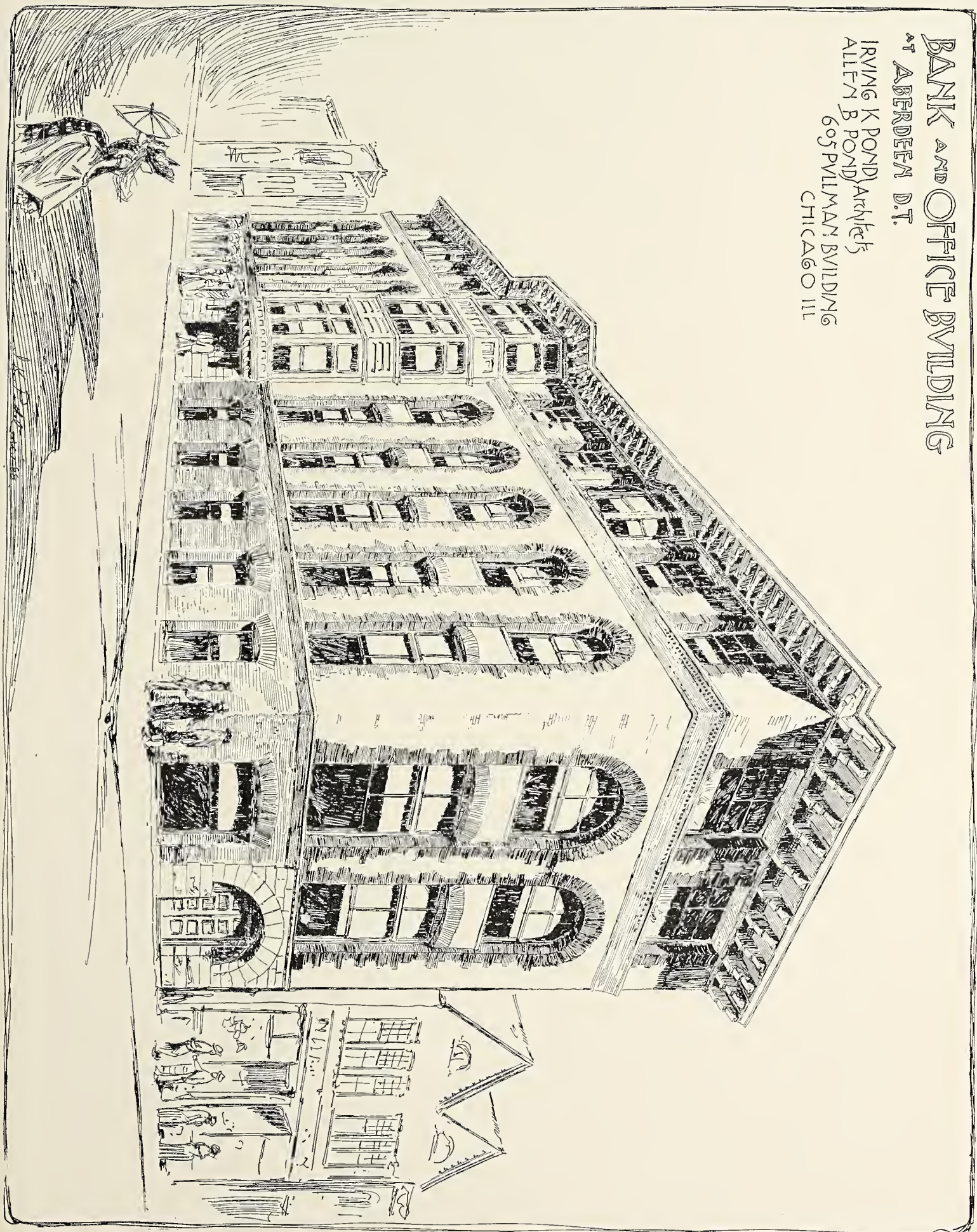
*Battle St Church
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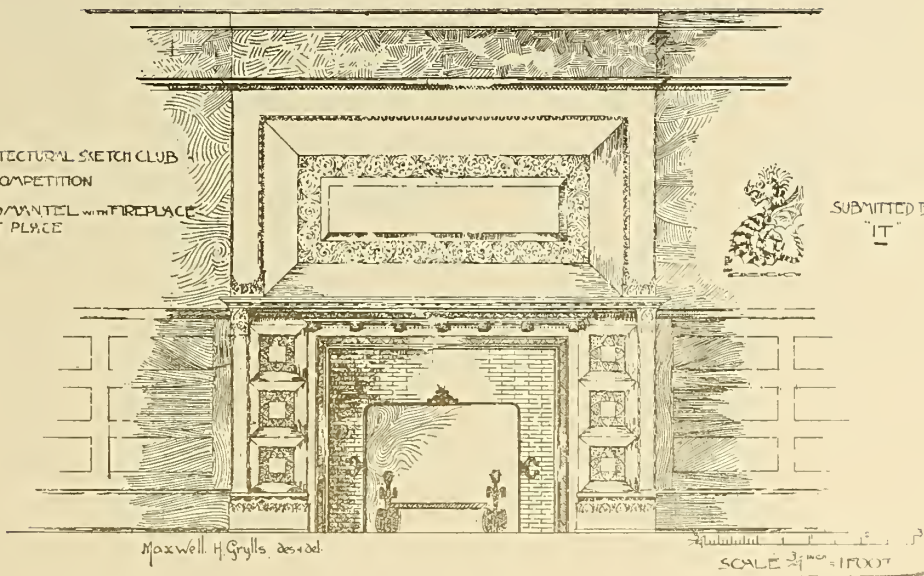
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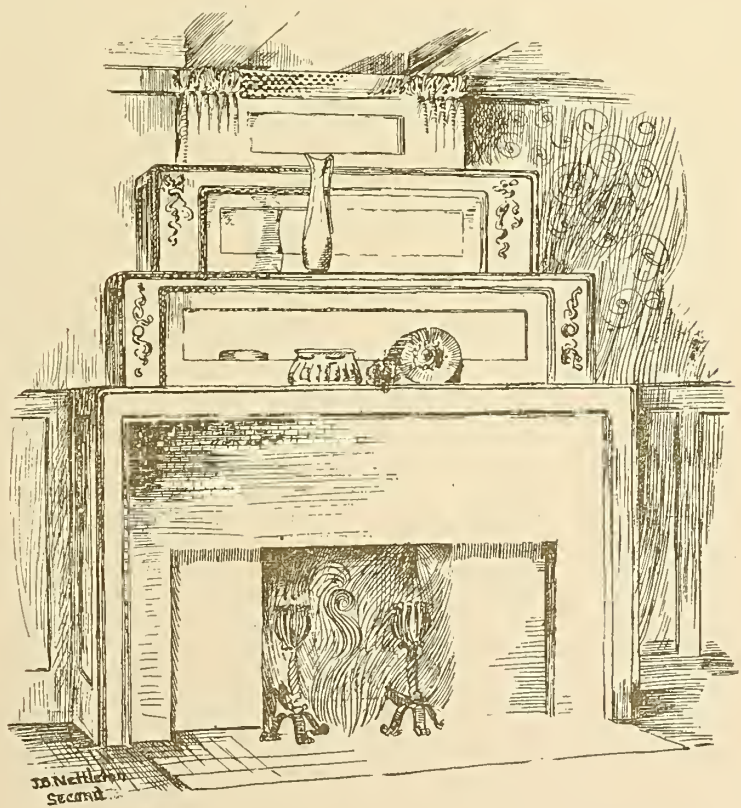
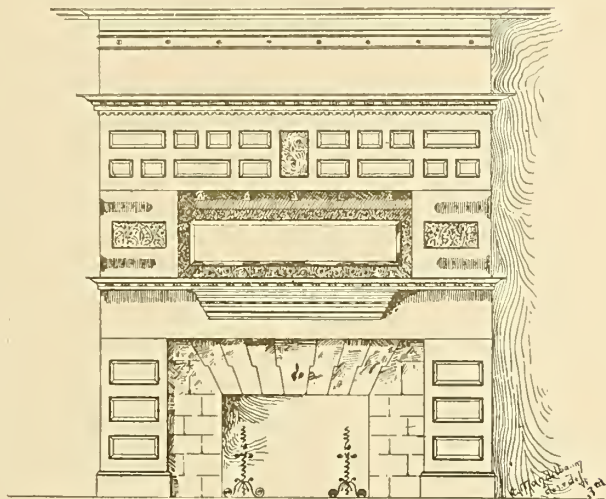
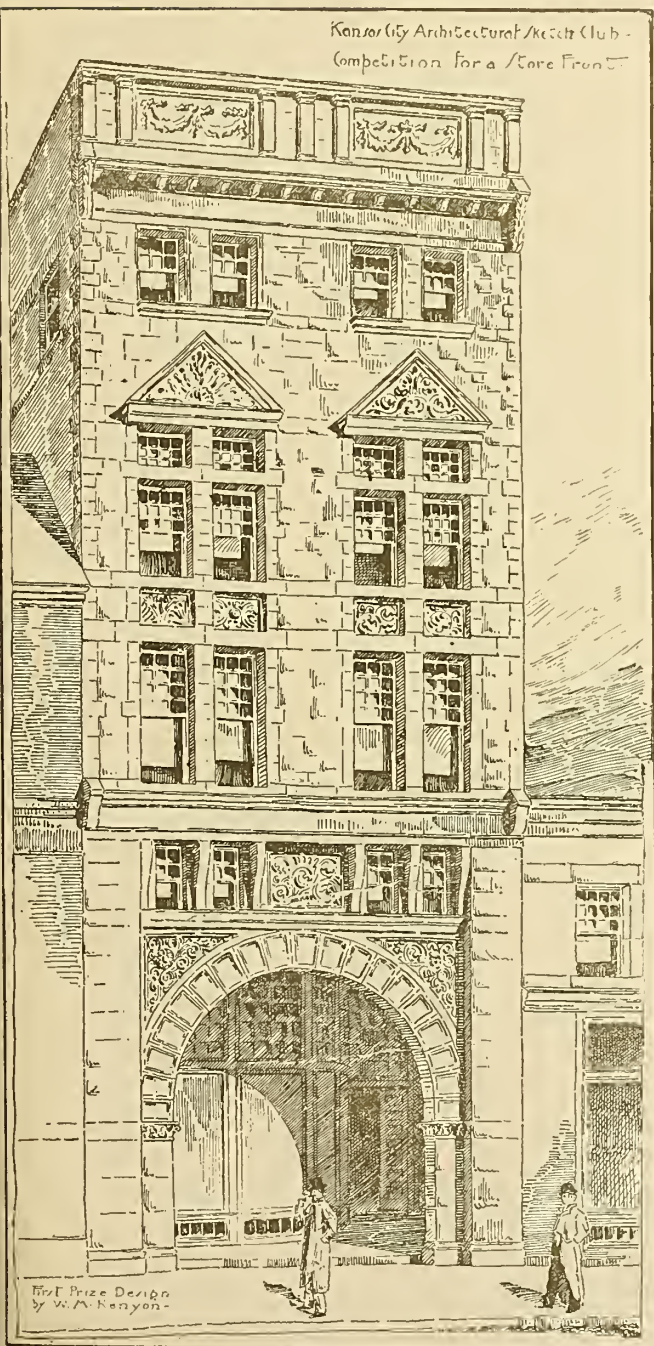


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VOL. XII.—No. 8.

CHICAGO, DECEMBER, 1888.

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INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

REFERRING to the movement for the formation of a “protective league” brought forward and discussed during the past year in the American Institute of Architects and the Illinois State Association of Architects, taken up by the Western Association of Architects at its last convention, and again discussed at the last meeting of the Illinois State Association of Architects, we wish to express our sympathy with the objects of the movement and pledge our support to any and all reasonable measures that are calculated to bring about a recognition by the public of the claims of the architect for a just remuneration of all of his work and for a reasonable definition and limitation of his responsibilities and liabilities. We do not believe, however, that the formation of a specific “protective league” is the best means for attaining the desired end. The architectural profession is suffering already from an excess of associations and corporations ostensibly devoted to the elevation of professional standards and to the advancement of the cause of the profession. Too much time and too much money is already frittered away upon chapters, state associations, local associations, Western Association, Institute, etc. We believe that the time has come when there shall be consummated a process of consolidation, amalgamation and re-organization among these various bodies that will leave us with but one national organization, and in each locality but one local organization, and that these shall be so judiciously organized and governed, and shall become so strong that there will be no architect of standing, or entertaining aspirations toward good standing, who will not be a member of the national organization and of his own immediate local association.

WHEN this is once done, when these associations shall embrace in their membership the best men in our profession, as well as the overwhelming majority of the average rank and file, and when, by reason of such large membership, their income shall be sufficient for the purpose, then the national organization and each local organization will become from the very force of circumstances a “pro-

TECTIVE league.” But, that these protective leagues, by whatever names they shall be called, may really protect, they must have not only numbers—although that is an indispensable qualification—but also money—much money. If test cases are to be fought in the courts, and carried to the highest courts, this can be done successfully only by the assistance of legal talent of the highest grade, and this cannot be obtained unless a large fund is at the disposal of those who will represent our profession in these combats. We have given numbers the prior mention in the requisites for success, and have done this for two reasons: first, that without numbers the necessary funds cannot be obtained; and, secondly, because, even were this possible, a large numerical membership is indispensable, so that the secession of a few individuals from the great body may not produce disastrous effects.

AND we anticipate these secessions and much dissatisfaction from the operations of a properly conducted “protective league,” for such body cannot constitute itself a general collecting agency for every claim any architect may have, or may think he has, against a client or a contractor. It must necessarily confine its interference to those cases in which principles and issues defining the rights, responsibilities and liabilities of the members of the profession at large are at stake. And necessarily cases of this nature will be comparatively few and far between, while petty squabbles and misunderstandings about settlements between architects and their clients and contractors will be numerous, and will be increased if it is known that there exists a powerful body whose duty it is to take up battle for the architect under all conditions and under all circumstances. But human nature is so constituted that there will be many, very many, who can see no good in an association except for the immediate furtherance of immediate and petty selfish aims and ends. Many of these, therefore, will be disappointed in the working of an organization such as that we have described, and will secede. Hence the necessity for great numerical strength, so that the secessions, sure to occur, will not materially affect its efficiency. We have endeavored in the foregoing to define our position with reference to this important issue. We request our readers to favor us with their views in the matter, whether they agree with the foregoing, or whether they are in part or totally opposed to us. It is our desire to secure a free and full discussion, and we tender our columns to those who wish to participate in it.

Illinois State Association of Architects.

THE December meeting of the Illinois State Association of Architects was held Monday, the 17th instant, at 1 P.M. The following members were present:

W. W. Clay, O. J. Pierce, L. H. Sullivan, L. J. Schaub, D. Adler, C. Stiles, George Beaumont, S. M. Randolph, H. L. Gay, A. Smith.

After the luncheon was partaken of, President W. W. Clay called the meeting to order and Secretary O. J. Pierce read the minutes of the last meeting, which were approved as read.

The Chair called for the report of the Executive Committee.

Mr. Sullivan: Mr. President, I will say the committee has held but one meeting, and only in a general way sketched out a programme of work. The question of quarters for the association came up, as it seemed desirable that some more suitable place for holding our meetings should be secured. Of course, our present quarters are engaged until the 1st of May. It seems desirable that we should have a place where our accumulating periodicals, books and literature can be placed accessible and in safety, and it was discussed that perhaps we could find some suitable place at a reasonable expense by taking a ten minutes' car ride from the center of town. The subject of discussions for the year was also entertained in a general way. It seemed desirable to continue the symposium, and the suggestion was offered that it be conducted by dividing it into groups of membership, and in that manner any one group could be called upon to conduct the symposium. The subject of a protective league was also brought up; the letters received in answer to the circular looked over and put in proper shape for presentation to this meeting.

S. A. Treat: I would like to inquire, as I was not present at the meeting of the executive committee, in speaking of having quarters at some out-of-the-way place, away from the business center, whether any particular place was had in view?

Mr. Sullivan: No. It was only discussed in a general way that a suitable place could be procured somewhere outside of the center of town. Mr. Treat: We don't want to get too far away from our offices. It seems to me it should be somewhere near the business center.

The Chair: This is a matter that can come up for discussion when the Executive Committee make some definite proposition.

S. M. Randolph: It seems to me, as we have heard the informal report, it would not be out of place to offer some suggestions to the committee. Let me suggest the North Side as a good locality. The cable loop passes most of our offices, and rents on the North Side are cheaper; for this reason, it seems to me, it would be more acceptable than an outside locality on the South Side.

The Chair: In reference to the suggestion made by the Executive Committee, that the subjects for discussion for the present year be divided among groups, let me say the committee would be pleased to hear from any member, between now and Friday, of any subject you would like to have discussed at your meetings, as it will be quite difficult to select topics, and I therefore suggest that the members assist the Executive Committee in deciding on the topics. You can send them to the chairman, and we will try to decide upon some day for the discussions.

Geo. Beaumont: I think it would be wise in the members of the association to look around the city to see if some suitable place for our meetings cannot be found, and report to the executive committee; giving the locality, rent, accommodation, etc. I think it is very necessary that we have permanent quarters, that shall be fireproof, for the preservation of our accumulating literature and documents. I think the Auditorium Building would be a good place if we could get it cheap enough.

Mr. Adler: There will be no cheap offices in that building.

The Chair: Mr. Beaumont has suggested that we have fireproof quarters to secure our periodicals and literature. I think it would be well for the Executive Committee to look over the long list and see if there are any subscriptions that should not be renewed. It may be there are some that are not worth renewal.

Secretary Pierce: I have received four bills for renewal. Those I sent to the chairman of the Executive Committee. Two renewals have been made. The former secretary suggested that I should make arrangements with Mr. Cross for the subscriptions, as he had done so last year. I would ask for definite instructions.

The Chair: I think they should be sent to Mr. Cross; that any bills that are sent in should be referred to the Executive Committee.

Mr. Sullivan: I think it would be very well to have it understood that the Executive Committee shall keep a memorandum book to record the instructions given to it.

The Chair: The report of the Committee on a Protective League is now in order. We are ready to report, if you will excuse me, without leaving the chair. There are some specimen letters which give some points that I would like to read after reading the report. It is as follows:

To the Illinois Association of Architects:

CHICAGO, December 17, 1888.

GENTLEMEN,—Your committee, appointed during the last term, upon the subject of establishing a protective league, would respectfully report that immediately upon receiving the very excellent paper of Mr. L. H. Sullivan, which contained an almost complete digest of what would be a fair basis upon which to form a league, the committee published a circular. Something like six hundred of these circulars were distributed among the architects of the United States, and were divided so as to reach almost every district.

The response to the original circular was not speedy in consequence of no limitation being suggested as to the time of response.

Later on, the committee realized this, and issued another circular calling for immediate response. In answer to this circular the committee have received one hundred and seventy-two answers.

These answers represent the opinion of ninety-one localities, situated in twenty-eight states and territories.

Out of these replies, thirty-six returned the answer that they had not received the original circular, reducing, therefore, the actual number of replies to one hundred and thirty-six. Of these, one hundred and twenty-five replies were favorable, and of the favorable replies, one hundred and four were willing to join a national league, eleven favored state organizations and the residue did not feel themselves in position to join hands at present, although, as aforesaid, they were favorable to the general scheme.

Of all the replies received, fourteen only were unfavorable, and three, while favorable to some procedure, thought it a difficult and almost impracticable undertaking. Among the latter, one seemed to think that it would be illegal to establish any league for defense of rights, and referred to the law of his own state, but thought perhaps the establishment of a league in some other state might be accomplished in a legal manner. This was the

only technical objection raised, although one man objected to the name of league and one or two others, to what appeared to them an attempt at trades unionism. This has been so far from the idea or expression of the circular that your committee hardly feel that such objectors have carefully examined the manuscript.

Your committee think, from the above results, that no time can be lost in forming an organization upon the basis suggested. It is true that the matter has been brought up before almost every state organization, and is also suggested to be considered in the deliberations of the body which has in charge the consolidation of the American Institute of Architects and the Western Association of Architects. We believe, however, in reference to the latter that they will have plenty to think of in order to effect the union, taking into consideration what, so far as the union itself is concerned, must be foreign matter.

The committee would therefore call upon the Illinois State Association of Architects to permit them, through their new executive board, to take immediate steps in this matter, for they believe that while during the coming year the executive committee of the Illinois State Association of Architects has determined upon a considerable amount of active work in which the members of the organization will be called upon to assist, they think no greater work can be accomplished by the committee than the one which is proposed in this report. With your permission, extracts from a few of the more prominent letters received will be read, in order that you may have a clearer idea of the opinions of others in reference to the proposed league.

W. W. CLAY, Chairman,	} Committee.
S. A. TREAT,	
F. BAUMANN,	
J. L. SILSBER,	
ALFRED SMITH,	
ROBT. BERLIN, Secretary,	

The Chair: The first letter is from a gentleman of Kansas City, who didn't receive the circular. He says:

I don't know what the communication is of August 1, that you refer to. I never received anything of the kind; don't know what you mean by a protective league, and therefore don't know what to think of it; don't know what it protects, or whom, or by what means, etc. Perhaps you had better inform me.

The next letter is from a man who is probably in favor of protection. I read it as a specimen letter. It is from Alabama:

If by entering the protective league I can advance the cause of architecture without expense to myself, I will gladly do so; but as I have a brother who is a lawyer my little legal services cost me nothing more than witness fees, etc. I have now a suit on and may be able to give you some items when judgment is given.

I have a letter here from a gentleman who doesn't like the name. I'll read an extract in reference to that.

There was one word I hardly liked in it (the circular) at the time, and it is again forcibly brought to my notice by the slip sent to me, and that is the word "league." Isn't it rather an unprofessional word? We hear so much of it; the Irish League, the Butchers' League, the Car-drivers' League. It is only an idea, but it sounds so inartistic. Of course, you have all thought it over and know best. However, you have my hearty coöperation, and I shall be pleased to give any aid and assist you all in any way you may suggest.

That is one objection. So you see there is something in the aroma, although it may be called another name. Here is a letter from another gentleman, who is in favor of the league, and he tells how they do things down in Texas:

I am quite in accord with your association and the advisability of a protective organization, and any other good measure which assists the members of yours and affiliated societies. But little good can accrue to active members resident in this state, as the laws of Texas are immature and irregular—protects a man and his money or goods, and concedes little or nothing to a claimant. By suing in a justice court an architect might gain his case, with full costs and damages, thereby establishing a precedent; but to find his client's house, furniture, horses, business premises, etc., are his wife's, at least in name, and no amount of litigation will force madam to pay a penny, the only visible recourse an architect has is to take stock of his client; keep his fees well paid up; do his duty; think well before giving a decision; have a clerk of the works where possible or necessary, and make him responsible; commit little to writing, and where the slightest compromise might arise, make it orally. So, all things considered, it does not appear that by at present becoming a member could do me any service.

This is the Texas idea. Here is a letter from a gentleman of St. Louis, who believes in a league in a general way. I'll read an extract. He says:

I will add our chief difficulty here has been to find an attorney of sufficient ability and experience to be eligible to the position of attorney to the S. M. A. A., who will consent to undertake the duties of that position without an assurance as to compensation which we are not in a position to give. In regard to legal inquiries from architects non-resident in this city, the difficulty of getting a statement of their case on which a lawyer could base a reply, or on which an association could bring suit without a personal interview and cross-questioning by our attorney, seems at present insuperable, and to architects living remotely from this city such personal interview would be more expensive, perhaps, than a resort to local attorneys, and the association attorney would be limited in his active practice to city cases, and occasionally to service of consulting counsel, perhaps, in country cases. I shall wait with interest the result of your deliberations.

A gentleman of Kansas City says:

I think some such protective organization in each state should be formed. I also think, although it hardly comes within the scope of this scheme, that local independent leagues could be well organized with benefit to the profession. Our local society here has already adopted a resolution that no member shall begin a suit without having first presented his case to the executive committee, which shall investigate the justice of his claim, and that moral and financial support shall be given only on a two-thirds vote.

A rather interesting letter comes from Utica, N. Y., of which I read this extract:

If you will allow me, I would like to offer a few suggestions: First, let it be a national league, open to all members of the profession who are engaged in the honorable practice of architecture, in accordance with the rules of the several associations. It is obvious that for an independent league to be formed in each state, there would be a great diversity in the articles of association, and some leagues would be much stronger or weaker than others, while none would be so strong or effective as if all were one. A national league could be divided into chapters, so as to best accommodate distant members, and still all be under one head. Secondly, in referring to that clause of your circular which reads, "that they should espouse the cause of the member only after examination has convinced them that it is one in which a decision would be of value to the whole profession," I would suggest that its scope be enlarged to include all important cases, even if one should be found precisely like one upon which a decision had already been obtained, and which, therefore, would not be valuable for its decision. I also think one great object should be to secure a uniformity of practice among its members, and the discrimination among them of important information bearing upon the subject, and thereby creating a tendency to prevent as well as to carry on a suit. I am interested in your progress, and shall be pleased to hear more from you in relation to it.

Of course, gentlemen, you will excuse me for reading these letters, but if I have been through 172 of them, you certainly ought to be able to stand excerpts of a few of the most important of them. I have scratched out a part, and only read the most interesting portions of the few I present to you. Here is a letter from Detroit, Mich.:

I received a printed circular relative to a protective league, and I heartily indorse the scheme, and am ready and willing to add what I can to the enterprise. Our firm has now a case pending which will be of some interest to the profession. We were requested to prepare drawings for a plain factory building. We did so, accompanying them with an estimate. The owner employed another architect. We sent in a bill for \$170, one per cent of the amount of the estimate for the study. Payment being refused, we sued, and got judgment in the lower court. The case was carried up to the supreme court,

where the judgment was reversed on the point that we had no right to charge a percentage on the estimate, as we might vary the estimate to suit, thereby increasing the amount of our bill. A new trial was granted, which has not yet come off. If, in case the view of the supreme court is held, it would put our profession in bad shape, for we would then have to charge by the hour or day for our work on studies or incomplete plans, which might be abandoned by the owner. Will be glad to aid in the formation of a league to protect the interests of our profession in any way.

Here is an unfavorable one:

In regard to the "protective league," mentioned in your circular of August 1, I am very much inclined to doubt its practical value, or its value in a general way to our profession.

Another gentleman replies in this way:

In reply, would inform you I don't want to take any stock in it or be a party to it.

Here's one from another gentleman who is in favor of a league. He is of Washington City. He says:

In my experience the client has as often tried to overreach the contractor as the contractor the client. The same is true of the architect and client. The client has oftener succeeded in overreaching the architect than he has the contractor, i. e., when everything was above board. The time has now come when it requires "eternal vigilance," and a continual struggle to keep even. A strong combination, simply by virtue of its numbers and a bold front, is always surer of its rights than a single individual.

Here is another from Utica, New York:

A protective organization, as outlined by your circular of August 1, if properly organized and conducted, will greatly benefit and strengthen our profession just where it needs it.

And, gentlemen, here is one from Professor Ricker, of the Illinois State University:

I have felt a great interest in this question, believing that it would eventually prove to be the only means of establishing the proper status of the architect, and his property rights in the results of his brain labor. Very few architects have the time or money to fight questions of this character to a successful issue in the courts, in order to establish a principle, and they usually find it more prudent, financially, to compromise, on the principle that a half loaf is preferable to no bread at all, or the prospect for a bitter contest for the entire loaf. But to successfully carry out any such organized plan for this purpose will require men of the greatest practical good sense as managers, who will not waste the resources of the league in petty legal contests, where there is not a valuable principle at stake, and who will not take up cases in which the architect has himself been at fault, no matter if he has largely contributed to the funds of the league. The best legal talent would also be required, as this would certainly be employed against the league, and this is rather a costly article at present. A strong and sympathetic *esprit du corps* between the majority of the architects in the state would be necessary, and this can hardly be assumed to exist at the present time.

Here is one from Professor Osborne, of Cornell University:

The circular of your association relative to the proposed "protective organization" is received. The matter has already otherwise been brought to my attention, and I have given it careful consideration, and can say, therefore, that I think the action proposed is certainly sound and essential to the best welfare of the profession, and that I shall be pleased at all times to work with you, in any reasonable way, to accomplish the end in view.

I have one or two more letters. Here is one from T. W. Clark, of Boston, in which he raises the question of legality:

Your admirable circular about an architects' protective league interests me greatly. Please, however, allow me to meddle with what is in better hands than mine, so far as to suggest that the incorporation might, with advantage, be taken in the state which, by its statutes, presents the best opportunity for effective action. Separate state associations would be too small to be of great influence. Moreover, combinations of men merely to assist each other in lawsuits are illegal. The French Protective Association was formed under a special statute, empowering such means to be taken for defending the rights of artists and professional men, and some state may have a statute of similar character, under which the league could be incorporated here. I assure you I think this is the most important question of the profession, and that an immense amount of good could be accomplished. The reports of the French association have been sent me. They have now over two hundred members, and have cases going on all the time, besides those which their prompt interposition settles out of court.

I have a reply to this letter in one received from Mr. O. P. Hatfield, of New York.

Some time in August, I received a copy of a paper, prepared by Mr. L. H. Sullivan, of your association, in which the subject of a protective league for the architectural profession was treated and the formation of one such society in each state was advocated. The purpose of such societies was pointed out to be the defense of the members in all typical cases of litigation where a fundamental principle was involved as between the practitioner and his client, and where the established rights and annuities of the profession were endangered. At the time of receiving the copy of the paper, here referred to, the summer vacation was at hand, and my absence from town and the subsequent absorption of my time in the constant demands of business prevented my giving the subject the attention it deserves. I write now by way of apology and to say that there is no doubt, in my mind, but that the movement is one of great importance, and if pursued to a successful issue would result in measures of undoubted value to the profession and of grateful protection to the individual member involved. (Mr. Clay: Here is an answer to Mr. Clark in a general way.) An organization in New York, a part of whose duty it is to act in the line indicated above, is the Working Women's Protective Union. Besides looking after the general welfare of the working women, it aims especially to provide them with legal protection from the frauds and impositions of unscrupulous employers. It has been successful in recovering nearly \$50,000, by collections, for working women. Some twelve thousand complaints have been presented. (Mr. Clay: We have an organization of this kind in this city.) Precedents for such action are not taken before there is a sufficient prospect of its success to warrant the undertaking. Of such combination, I think, however, that suit should be brought in each case in the name of the aggrieved party and so defended, the society assisting the latter in case of loss. Perhaps, at first, only a skeleton form of organization would be necessary; members being assessed for expenses and for funds required in its legal operations. I repeat, I think such societies, especially of extended membership, would exert a very great influence in deciding such cases of litigation, and prevent a resort to the law by a large class of aggressive clients. In some cases, even after proceedings have been commenced in court a settlement could be more readily obtained where the marshalling of efficient forces can be displayed.

I think these are all the letters I wished to read. It has taken some time to read them here, but I think it is well that you heard them read. The committee requests that you should act on its report in reference to being continued.

N. S. Patton: Is it the recommendation of the Executive Committee to take the matter up?

The Chair: Yes, to take the matter up in some form.

Mr. Adler: This matter is still in the hands of the original committee, and you recommend its reference to the new Executive Committee?

The Chair: Yes, I think the matter is of great importance, and if it is possible it should be brought to some practical use.

Mr. Adler: I move the Committee on Formation of a Protective League be discharged, and that the matter be referred to the present Executive Committee, and that the old committee be requested to turn over all the documents now in its possession to the same.

Mr. Randolph: I second Mr. Adler's motion.

The question on being put to vote carried unanimously.

Mr. Patton: By the adoption of this motion, does it not commit this association to a protective league?

The Chair: Not necessarily. Twenty-five states have received and answered the circular, and almost all of them are in favor of it.

Mr. Patton: Do they not think a national organization is preferable to a state?

The Chair: Only three were in favor of a state organization. Of course, it is difficult to say what the deliberations of the committee will result in, but, of course, it will not take any action without informing the Illinois State Association.

Mr. Adler: I believe whatever the committee does it should be well defined, whether it be to have an independent society, or the end will be best served by making the Illinois State Association the party to take hold of the matter now. Whatever is decided upon it should define the course of procedure and the character of claims to be taken up. If this association is to take the initiatory, what may be done will be of value to the profession at large, and if the movement to consolidate the American Institute and the Western Association comes to a successful issue, and if the new-formed Institute wishes to take the matter up, then, the work done by the executive board of this association will be so much ground that will not have to be gone over again. If the consolidation does not take place then the work of this association will be of value to both associations. It will be work that must be done anyway, and it may as well be done by the present Executive Committee of the Illinois State Association as any other.

The Chair: Mr. Adler must not imagine for a moment that there is nothing to do. The idea of the Executive Committee has been to devote the personal attention of the members during the present year to this scheme of a league, and determined upon this grouping of members to help in the work. Mr. Adler will probably be at the head of one of these groups which are to be formed in order to provide mutual instruction during the coming year, thus contributing to the Executive Committee's time to formulate, in some way, this league matter, and I am sure he will be very much satisfied to be placed in such a position.

Mr. Patton: The most important thing will be to get some such league in actual operation to learn by actual experience; therefore, it seems it would be well for our state association to take it up for the protection of its members, with the understanding that at any time it became necessary to have the organization take up the work it shall be turned over to it so that it can be taken up by it and pushed to a final decision. We might put in a year or two in that way with profit to ourselves.

The Chair: That is the idea of the Executive Committee. We propose to get this thing in practical working order.

Mr. Patton: I am in favor of the state organization taking the matter up.

Mr. Adler: I can see my way clear to that. I think while we of the architectural profession in general, are at present encumbered with the embarrassment of riches, still I doubt the advisability of adding another organization in which we are to contribute more time and money. I think we can manage this thing inside of the state association. We can make a rule that the Illinois State Association will take up the case of any of its members, if, in the opinion of the executive board, the case is one of interest to the profession at large, and in such a case the litigant will be required to pay a certain amount toward reimbursing the association for the expense it may be at. There may be in some cases, perhaps, a special assessment required to help develop the case. I think the committee can handle this matter. Our association isn't large—only forty-eight members. I don't think within that membership it would be difficult to take up the matter. I think, also, that at the same time we could make it a business to gather up the statistics regarding cases of interest. I think we can manage the thing with comparative ease.

The Chair: I think Mr. Adler's suggestion in regard to keeping down the number of organizations is a very important one.

Mr. Adler: Mr. Chairman, it looks to me if this association, with its forty-eight members, was ready to stand by the rights of its members in the courts, its membership would be liberally increased. I think it is easier to increase that membership within its present organization than it would be to obtain them in a new one.

Mr. Beaumont: Mr. President, until we find out the legality of such an organization as a protective league, it might be well to hesitate before taking action. As we are now organized we can, in cases of litigation, call upon any member as a witness, under the other we cannot without it being liable to have it construed as illegal. I have served in the capacity of witness in cases of this kind, and so has Mr. Treat and Mr. Stiles, and I think when it comes to a matter of right and a member finds it necessary to sue, he would not be acting wisely to go into court depending upon a witness who was a member of a protective league with himself. I think that any member of the Illinois State Association can depend upon his fellow members for protection as it is.

The Chair: I don't think, Mr. Beaumont, your view is in accordance with the general scheme. Witnesses can always be secured.

Mr. Adler: If we have a league in which we are bonded together for the purpose of pursuing a certain line of claims, I should not wonder if it might not seriously affect the result. My impression at this time is that it would affect the standing of a witness who was a member of the league, both with the court and jury. I think that is the one weak point in an organization of that kind. I don't think a member of such a league, brought up as a witness, would do any case any particular good.

Mr. Beaumont: That is just what I mean to convey. Until we can get on a proper basis, I think we had better depend upon individual testimony.

Mr. Adler: While not speaking to any particular question, I think, after what has been said and done, it will be understood that this plan for a protective league is not to make this association a collecting agency for every claim that its members may have, but that it will interest itself in only such cases as are of general benefit to the profession at large; that if I have a falling out with a client and bring suit against him, it does not necessarily follow that I am entitled to assistance from the league. It must

be a case that in some way involves a principle in which the entire profession is interested, for instance, involving the legal liability of the architects to clients and matters of that kind.

Mr. Sullivan: It is to get supreme court decisions on the most important questions in controversy between the architect and client that arise in the course of professional practice.

Mr. Adler: Perhaps at the outset, the league or association, under this general scheme, would tend, in some instances, rather to work financial injury to the litigating member, that is to say, a case may be brought into court, and it comes to look the architect was going to be successful; when the defendant would seek to effect a compromise, right here the league or association steps in and says, this case must be decided upon its merits; this matter has not been taken hold of for the dollars A, B or C is suing for, but this suit is brought as a test case to be of use to us as a profession hereafter. I bring this point up again because it cannot be too often mentioned. It is essential that people believe it is not a mere collecting agency, as I think that idea has cropped out in the answers to the circulars which we have received.

Mr. Sullivan: That is, this society proposes to furnish its members with a certain number of legal decisions as a part of the stock in trade. It does not make any difference whether there is much or little money involved, provided the matter is of such general interest as to warrant the society's action; that is sufficient.

Mr. Beaumont: I can mention a case that may not be uninteresting. A client came to an architect's office stating to him that he wanted him to build him a house, and subsequently the architect was surprised to find the house had been built by another party. The architect told the owner he must pay, when he was informed he must sue for the balance if he expected to get it. I had a case of that kind. I simply told the owner if he did not pay me for my services at once I would get out a warrant for his arrest for obtaining goods under false pretenses. A check came to me the next day for the amount.

Mr. Adler: I don't think Mr. Beaumont needs a protective league. He can protect himself.

The Chair: I think Mr. Beaumont would do for a standing committee.

Mr. Beaumont: I had another case—a German lady client who, after engaging my services, refused to comply with her contract. I engaged a lawyer, took the case into court, and secured a judgment for the full amount. She gave notice for an appeal. Thirty days is allowed to file the bond for an appeal. At the end of twenty days she came to my office and offered me \$100 to settle the case. I refused. Two days after she came in and offered me \$125, saying she was poor, and sick, and began crying and making such an outdo in my office, declaring that was all the money she had. To get rid of a fuss that I didn't think would do my office any good—I couldn't afford to have my office spoiled—I agreed to go down to the court with her and release the judgment. When we got down there, the clerk asked her if she had yet found a bondsman. She pulled out her bond, which had no signer, and told him "No." I concluded then I wouldn't release the judgment just then, when she opened her pocketbook

and paid me the full amount—\$175 and costs. That is a case where the architect was being bluffed out of his money.

The Chair: I do not think that architect was bluffed out of his money.

Mr. Adler: I think Mr. Beaumont would make a good president of a committee.

Mr. Adler's motion to refer the matter of protective league to the new Executive Board, on being put to vote, carried.

Secretary Pierce: Gentlemen, I have here a communication from the Western Association of Architects which I would be pleased to read.

Mr. O. J. Pierce, Secretary of the Illinois State Association of Architects:

DEAR SIR,—Please convey to your Association the thanks of the Western Association of Architects for the hospitalities extended to them during the recent convention.

NORMAND S. PATTON, Secretary.

On motion, the meeting adjourned.

Railroad Notes.

A NEW Pullman palace sleeping car line between Chicago and Philadelphia has been established, via Chicago & Grand Trunk and Lehigh Valley railroads. Limited express leaves Chicago at 3:25 P.M. daily, with one of the most modern Pullman palace sleeping cars, to run through to Philadelphia via Niagara Falls and the Lehigh Valley route, arriving at Philadelphia at 7 A.M. daily on the second morning. Returning, west-bound, the car leaves Philadelphia daily at 8 P.M., arriving in Chicago on the Pacific express at 8:10 A.M. on the second morning. What makes this route particularly popular is that on the east-bound journey a stop-over at Niagara Falls of seven hours is allowed, and on the west-bound journey a stop-over of four hours, giving passengers ample time to visit the Falls. However, passengers not desiring to lay over at the Falls on the east-bound journey may change at Niagara Falls, taking a Pullman parlor and buffet car, leaving the Falls at 8:30 A.M., arriving in Philadelphia at 10:49 P.M.

THE CHICAGO AND DENVER EXPRESS.—Commencing Sunday, October 28, the only exclusive through Pullman Car Line from Chicago to Denver, via Council Bluffs and Omaha, was established over the Chicago, Milwaukee & St. Paul and Union Pacific railways, on the following time schedule:

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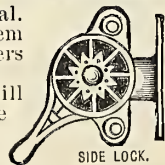
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JANUARY, 1889.

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A Monthly Journal (with an Intermediate News Number) Devoted to
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Construction, Decoration and Furnishing
IN THE WEST.

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THE *Century* for January contains an editorial article which every architect should read. It is entitled, "Are we just to our architects." We may make comment upon it in the future, but at present wish to commend the *Century* for placing the claims of the architect to recognition and compensation before the public with a force and truth not heretofore seen in any public journal.

THE third annual convention of the National Association of Builders of the United States will be held at Philadelphia, on February 12, 13 and 14, 1889. The delegates will, as far as possible, locate at the Continental Hotel and the Gerard House, on Chestnut street, and the sessions of the convention will be held in the new building recently purchased by the Philadelphia Exchange.

SECRETARY SAYWARD, of the National Association of Builders, in a timely circular letter to builders, calls attention to the work the association has in hand in the interest of the building trades. It is not because the advance has been slow or the successes already achieved by the National Association are unsatisfactory that this letter is addressed to those reputable builders not yet represented in the association; still the strongest reasons why each city should have its building interests united in an exchange exist. They are these, briefly noted by Mr. Sayward:

- 1st. There are many important subjects of vital consequence to all builders of the United States, reforms in which can only be comprehensively secured through the grouping of their interests in a national association, through which the most thorough consideration may be obtained and *concerted action follow in all parts of the country at one and the same time.*
- 2d. A national association depends for its best strength upon widespread and thorough representation from all parts of the country, and from all cities, whether great or small.
- 3d. The interests of all builders being affected by the action which may be taken by the central body, all builders should in some way be represented in its deliberations, and should contribute their counsel as well as share in the expense attendant upon the work.

It is manifestly true that the greater union the greater strength, and in no better way can the builders of a city benefit their own individual pockets than by forming and supporting an exchange that will represent the reputable builders and material dealers. It will regulate local interests, architects will have confidence in its members and then general building interests will, through its representation in the national body, be strengthened.

THIS National Association of Builders has, in its two years of existence, done a great work. Its formulation and adoption, in connection with the Architectural Associations, of a uniform contract form has been a signal move towards the establishment of a law in relation to the position held by the builder in relation to architect and owner. The work undertaken in relation to the apprenticeship question is of vital importance and should have the active moral and financial help of every intelligent builder, while the movement in regard to proper lien laws, the framing of a code of rules and conditions for estimating work, toward securing a uniformity of measurements, and a uniform size of brick, all of which are under consideration, shows that the best kind of practical results can be looked for in this association. At the coming convention, at Philadelphia, February 12, 13 and 14, these matters will be discussed, as well as insurance against accidents to the public; establishment of a department for giving sureties for contractors on submitted estimates or upon contracts; the establishment of trade schools; profit sharing, etc. As business men, the builders of the United States

cannot afford to ignore the work the National Association is doing, and their counsel and their money should be freely given that the great objects of the national organization be augmented to the fullest degree.

THE Chicago Architectural Sketch Club will have another prize competition the coming year. A friend of the club, D. G. Phimister, has placed \$50 in the hands of the club for this purpose. This competition may be among club members only, or it can be thrown open to draftsmen at large, as the club officers see fit. With the League competition and the two Chicago Architectural Sketch Club competitions this year, the draftsmen will certainly find sufficient encouragement to produce work which will make next year's exhibitions of these clubs exceptionally large and interesting.

COMPETITIONS for prize medals by the draftsmen of the United States were commenced by the New York Architectural League two years ago, the second competition for a gold and a silver medal having just closed. In opening its competition to the draftsmen of the country at large, the action of the League cannot be too highly commended, and this tacit recognition of the existence of other draftsmen in the West as well as in the East, shows a broadness of spirit that is supposed to be very often conspicuous by its absence in the cities upon the Atlantic coast. The first and second prizes of last year were both won by western draftsmen — one at St. Paul and the other at Chicago. This year the first prize goes to James Brite, of New York, the second to Oscar Enders, of Chicago. In congratulating the recipients of these tokens of superior draftsmanship, so fairly competed for and so equitably awarded, we would point out to these gentlemen, and those who will win these honors in the future, a danger to which their youth and their superior talent will render them liable. This is the danger of satisfaction. To win a prize for ability to design and to render artistically is one thing, and to possess a well-grounded knowledge of the principles of design and the method of rendering is entirely different. We would point out the possibility for the first to exist independent of the second. These prizes should be esteemed by their winners in the light of a qualification only. We say to these fortunate draftsmen: You have abilities which, if properly directed and trained, will make you successful architects. But it is a mistake to view these prizes in any other light than that of a reward of merit.

FOLLOWING close upon the League in order of precedence among the sketch clubs of the country stands that of the Chicago draftsmen. While the winners of the two second prize medals of the League are members of this progressive club, its development has not heretofore allowed the expense of medal prizes. Now, through the liberality of Mr. Robert Clark, of Chicago, a wealthy Scotchman who is much interested in the development of art, the club will open a yearly competition to the draftsmen of the country. Mr. Clark has donated to the club \$1,000, to be kept in trust by a committee of architects selected for the purpose, and which will provide prizes amounting to about \$70 yearly. Mr. Clark will also pay for the medal dies and the expense of the medals the first year. The generosity of Mr. Clark needs no comment by us. Its importance will be shown each year by the increasing talent displayed by draftsmen and the effect of example which will prompt citizens of other cities to aid the local clubs in a similar manner. Mr. Clark's name will go down in architectural history as that of the first citizen in this republic to recognize the vast amount of talent in that profession and encourage it by the establishment of a prize fund.

In a country like this, where the government displays its non-appreciation, if not ignorance, of architectural ability by giving to the chief architect, whose work represents from \$10,000,000 to \$20,000,000 yearly, but \$4,500 salary, nothing can be expected from it in the encouragement of architectural talent. It remains, therefore, for its citizens to take up the work. Fortunately we have young men of genius, and such men as Robert Clark, of Chicago, to encourage it.

THE necessity for an architectural school in the West is growing into a positive demand that something should be immediately done for its establishment. It seems to be the popular sense that this school should be located in Chicago, and that it should be wholly devoted to the rudimentary training of architectural draftsmen. In voicing this general sentiment we would say that its advocates have no word of disparagement to offer in regard to those schools in which the department of architecture has become noted, such as the Columbia College School of Mines at New York, the School of Technology at Boston, the department of architecture at Cornell University at Ithaca, New York, or that of the Illinois University at Champaign. Perhaps it is because these are deemed inadequate, or because the course of instruction is thought to be more theoretical than practical, and that a school in which the lecturers were active practicing architects would better serve present needs. Be these what they may, the movement is gaining ground steadily. The draftsmen are discussing it under the impetus of a provisional contribution of five thousand dollars to start an endowment fund. Architects for several years have contemplated its establishment as a better means of training their draftsmen than over their own drafting boards, and the wealthy citizen, with a wish to aid and foster art development, will see an opportunity for doing so, in the proffering of money for its establishment and support.

BUT let us see what an architectural school will cost. It should have a principal at a salary of say six thousand dollars. At least three professors at a salary of about three thousand dollars each, or nine thousand dollars. Then incidental lecturers at a total cost of about three thousand dollars yearly. Then, with rent at three thousand dollars, and incidental running expenses of at a low estimate of four thousand dollars, would make a yearly expenditure of about twenty-five thousand dollars. This would be a fair income from an endowment fund of five hundred thousand dollars. We think this is as low as any practical estimate can be placed, and one million dollars would not be too much to have to firmly establish a successful school; and with the intelligent moneyed men of the West interested in the advancement of art, of which architecture is the highest type, the contribution of such a fund should not seem formidable. Let them understand that there is want of such a school, where the genius of the draftsmen may be trained in direct lines of thought and work, where everything theoretical will be applied and merged into the practical as the student progresses, and that the future of American architecture depends upon the proper direction given to the coming generation of architects, and the work will be accomplished.

THE report has again been spread through the public press that "another fireproof building has burned." This time it was a theater and at Chicago. These reports are common, paradoxical as they may seem, and the public through them come to believe that no building is fireproof, or, rather, that a fireproof building will burn if it gets a chance. All this comes from interested parties calling this or that building

fireproof, often when they have scarcely a claim to being slow burning in construction. This was especially true when the Grannis office building burned in Chicago some years ago. It was exceptionally well built, and was reported to be "fireproof," when there was not the first requisite for fireproof construction in it, except the brick outside and main inside walls.

WHAT might have been another theater fire, attended with great loss of life, occurred in the Chicago Opera House on the night of December 10. Ten minutes after the performance closed, a boy attending the calcium lights, situated in the second gallery, upset his lamp, and in an instant the upper and back part of the auditorium was in flames. The Chicago Opera House office building occupies a corner, the building being L-shaped, and the court utilized for an opera house. The construction was to be entirely fireproof, and so designed by the architects of the building, and was so carried out until the roof was reached. Then it was found that the money appropriated for the theater would not cover a tile roof, and cheap methods were resorted to. We remember at this time of going to the agents representing the owners, and protesting against a mass of wood going into the roof of an otherwise fireproof structure, but was told that they had no money for a more expensive roof, or something to the same effect. However, portions of the structure of the roof were of iron, and these covered with tin laid on common board sheathing like any country barn. This, as it happened, was not a large factor in the destruction of the theater, though the roof was materially damaged by the fire and will have to be replaced. The fire was from another cause, and will be well worth remembering, even in the construction of fireproof theaters. The theater was "remodeled" by the lessees a year ago, the original architects having nothing to do with the work. In the course of this remodeling, the floor of the gallery was raised by a framing of wooden joists, and on this was laid a board floor, and the seats, or, rather, benches, were constructed entirely of wood. Chips, blocks and shavings were left in the inclosed space, all of which became kiln-dried by the heating of the building. It took but a few minutes for this mass of wood to ignite, and make an extremely hot fire. The blaze penetrated above the ceiling through ventilator pipes, and burned through the roof, the heat twisting the iron beams out of shape in many places.

ON careful examination it seemed apparent that the plaster on the iron lathing which formed the ceiling of the auditorium, as well as the lower galleries, had been forced off by the weight of water rather than burnt through by the exceptionally hot fire. This seemed the case even above the place where the fire started, and if true, as we have every reason to believe, it is a strong argument in favor of iron lath in theater construction. Of course, the fireproof tile partitions with which the fire was surrounded were not affected by the fire, and it is safe to say that if the architects' plans had been carried out and the contract for fireproofing had not been cut down the fire would not have gone beyond the gallery, where it started, though from the combustible nature of the whole remodeling of the gallery, the damage to the interior would have scarcely been less. Beyond this upper gallery the heat, smoke and water did more or less damage, but excepting the roof, which was not fireproofed, the structure of the theater was wholly uninjured. Someone will get burned in one of these so-called fireproof buildings some day and there will be a fine case of manslaughter against the owners if it is proved that the building was entered on their assertion that it was fireproof.

The Architectural League Exhibit.

BY W. B. MUNDIE.



MEDAL OF THE ARCHITECTURAL LEAGUE OF NEW YORK,
Designed by EDWIN HOWLAND BLASHFIELD, N. A.

THE fourth annual exhibit of the Architectural League of New York opened at the Fifth avenue art galleries on December 22, open to the public for three or four weeks.

It is certainly the most interesting, largest and best exhibition of its kind ever held in this country. The display fills the three large galleries completely, the innermost gallery being devoted to the loan collection, consisting of sculpture, paintings—of architectural subjects almost exclusively—tapestries, bronzes, mosaics, inlays, artistic glass and furniture, etc., of every description, for decorative purposes in the arts allied to architecture. In the main gallery are hung the drawings and designs, etc., illustrating the architecture of today, the past, and in many cases we hope, for the future, mainly the work of individual members of the League, though Boston, Philadelphia, Washington, Chicago, St. Louis and other centers are well represented. In the first gallery, as you enter, may be found the designs in competition for the gold and silver medals of the League, cartoons and designs for stained glass, and other drawings and bric-a-brac of a miscellaneous nature.

There are many reasons why we should regard such exhibitions as beneficial; it awakens an interest in architecture among the general public, and it is a step in advance toward educating the public that architecture is the highest of all arts. Teach the public to know the difference between a good and a bad design, or we can never hope to have an appreciative and advancing people. It also awakens a lively interest and interchange of thoughts and ideas among designers themselves, the ladder of the individual architect becomes more easy to ascend and the profession of architecture is the gainer in every way.

On the evening of December 22, the League gave an opening reception and private view. It was a very brilliant affair, and to one who was fortunate enough to receive an invitation, it impressed upon his mind that architecture was not all brick, iron and stone. A mandolin orchestra rendered music throughout the evening to the gaily-dressed and admiring guests who crowded the galleries to their utmost capacity. During an interval, Mr. John Beverly Robinson, president of the League, called the assembly to order, and in a few well-expressed words presented the medals to the winners for the year 1887, the first medals given for architecture in this country; the gold medal to Mr. James A. MacLeod, of Minneapolis, the silver one to Mr. William B. Mundie, of Chicago. He then made known the names of the successful young draftsmen in the competition for the year 1888. The gold medal was awarded to Mr. Jas. Brille, of New York, a member of the League, and the silver medal to Mr. Oscar Enders, of Chicago. Four honorable mentions were given to the following: Julius Harder, of New York; R. C. Spencer, Jr., Boston; Wm. H. Orchard, Rochester, and Albert R. Ross, of Davenport, Iowa. Fifty-five designs were submitted and fifteen were selected and hung, including those mentioned. Prominent among others possessing merit that are hung, are drawings by Arthur Heun, Chicago, and Jas. A. MacLeod, Minneapolis.

It is magnanimous on the part of this League to give these medals in competition among the junior members of the profession, not alone for their own state, but free to all in this country. It certainly is to their credit that they were the first to act in this manner, thus beginning at the foundation for elevating the standing of the profession, by recognizing the junior architect, placing before him something to strive for and well worthy of

winning, placing him in higher estimation of both public and profession, and when held in conjunction with such an exhibition, it is truly an example which other corporate bodies might do well to emulate. This is the legislation needed to elevate the profession of architecture, the capable and fit man needs no state or national act of law to enable him to succeed.

On entering the first gallery, the medal drawings are hung on the left. The gold medal design is a water-color of peculiar but rather academical handling. The coloring of the perspective is artistically executed, especially the surroundings, the design, which is lined in with a pen in pale ink on the color background, gives a nice effect, but the pen handling is weak and undecided; of the design itself there is very little to it. It shows the front of a small Grecian temple protruding from the side of a hill, the cornice moldings and entablature dying off in the hillside, a feature open to criticism. Behind the two center columns, which, with the corner pilaster columns, support the pedimented entablature, is the tomb proper, raised up from the floor. The design is in the Ionic order, and the whole built upon a terraced approach with retaining walls on either side. It exhibits little originality, but is rendered in a telling and striking manner with a feeling of dignity and respect which "an eminent architect" should always command, whether dead or alive.

The silver medal goes to a design rendered in pen and ink in a masterly, free and decided manner; it is an oblong tomb placed on a level bit of land beside a broad sheet of water, indicated with but few lines, suggesting a rather desert-like situation, as if the occupant was dead (in earnest) and far from home surroundings. This feature in itself is one of its chief merits as a piece of draftsmanship. The design is also Classic, as are almost all the others more pretentious than the gold medal design. The tomb occupies a position at the rear end of a raised platform, circular on the ends, which forms a seat, and approached in front with a broad ascent of a few steps in height, the whole being a difficult problem, and the scale, elevations and plans show thought, study and careful finished drawing.

It is interesting to study, in connection with the medal drawings, a design for a tomb, No. 458 in the catalogue, by Cass. Gilbert, and No. 159, a tomb, by A. Page Brown, the rendering of the former being a hasty, but effective combination of brush and pen work, the latter in color, with a good distance effect, the façade of this latter being something similar to the gold medal design.

Passing on, one meets many views, exterior and interior, of European cathedrals, drawn by Joseph Pennell, many of which have been published in current magazines. Two decorative figure studies in charcoal, by F. S. Lamb, are worthy of note; also two studies, similar in size, designed for glass, by Maitland Armstrong.

On the right hand several full-length cartoons for stained glass in foreign cathedrals and churches, all designed in France. They are interesting to those who like to study their manner of composition and design in this line of architectural accessories.

Passing through into the main gallery, one is confronted in the center by a large screen in the form of a letter H, upon which, inside and out, are hung in the post of honor, Mr. C. B. Attwood's successful designs for the new municipal buildings in New York, and many designs and original compositions in line by H. P. Kirby, drawn in his own peculiar style, as only he can do, for in original composition, vim and dash in execution, his work is wonderful; one never tires of studying his designs. To the left is Mr. R. H. Robertson's design for the new *World* building; it is hung too high for close study, but as can be seen it has high and "heavenly" aspirations, judging from its extreme height and corner tower, which extends up some twenty stories. It is artistically drawn by Henry Neu.

A church in Kansas City, by James & James, is good, but suffers some from its dark and labored rendering. Close by is a design for a city residence, by Lamb & Rich, broad in character, the first story seemingly dwarfed by the heavy massing above. It is rendered in pen and ink, by J. E. Wallis. Glancing at the catalogue we notice two cottages, Nos. 17 and 23, by W. S. Knowles, architect, and rendered by C. D. Luce, as also Nos. 31 and 50. They are exquisite bits of color, unnatural but picturesque. One is charmed by the delicate touch they express; still, on second sight, it is reasonable to expect more detail on such architectural subjects; it is poetry in color, and a nice, rapid and effective way of making sketches. In comparison with this is a sketch on the opposite wall of a cottage, by Rossiter & White, architects, and drawn by E. K. Rossiter; very similar in handling to those of Mr. Luce, still there is more detail; the foreground and surroundings express ground and not vapor, and altogether it is a happy medium between the strictly architectural and the artistic treatment of an architectural subject. It is one of the best things in the exhibition. Just above this is a color perspective of a residence in Chicago, by Burnham & Root, a good design and cleverly rendered by J. Beeckmann.

In No. 379, the interior of Bates' Hall, Boston Public Library, by McKim, Mead & White, architects, one is impressed with its grandeur and magnificence. It is well adapted to serve its purpose as a memorial hall,

A natural piece of rendering is seen in Brunner & Pryor's sketch of Hotel Powers, at Big Stone Gap.

Two frames, by Wilson Eyre, of Philadelphia, one a casino at Bar Harbor, the other a church; both designs exhibit considerable novelty, are quaint and very picturesque in outline. The rendering is also worthy of note; they exhibit dash and facility in execution, and the low color lines in the first washes are in feeling with the designs themselves.

Mr. Chas. T. Mott has a beautiful drawing in his sitting-room mantel, but for a sitting room we should say it was too ornate. This drawing is well reproduced in the catalogue, and also Messrs. Thayer & Robinson's design for the Manhattan Athletic Club, a pretentious building, and one which would command respect when built.

Many small color sketches, bits of odds and ends, are interspersed on the wall surface, some of them charming things, mainly executed by Geo. C. Palmer, G. Femold, Clarence Luce, H. T. Schadermundt, William B. Bigelow and others. The same may be said of many of the small, but excellent, pen sketches, not only by architects, but by artists of some note.

Two interior sketches in color, designed by Little & O'Connor, architects, and colored by Alvan C. Nye, are capital, both in design and rendering; one especially, No. 92, is very strong in design.

A pretentious drawing in color is that by Herter Bros., No. 329, a dining room in residence of Potter Palmer, Chicago. It is rich in color, but one longs for some place to rest the eye. Intricate detail is presented everywhere and touched up with an enormous amount of labor. In No. 191, a design for a church, by F. E. Wallis, there is some excellent grouping and design, but the rendering is somewhat "off" in drawing and color. Three charming sketches of a church, by Peabody & Stearns, are down in the catalogue, No. 201; they are beautifully rendered.

A mausoleum, by A. Page Brown and Augustus St. Gaudens, is a beautiful design expressing much, and deserves better handling by the draftsman. The same may be said of the new Yale memorial library; the scenic effect of color completely smothers the design, which is very good indeed, and the sketch of the main entrance of this building in the catalogue is an excellent bit.

Mr. J. A. Schweinfurth has two frames, Nos. 130 and 139, large and bold in rendering, but too indefinite to do the design justice. No. 130 is catalogued as "a design for a Lennox House." What "a Lennox House" is the writer is ignorant of. Is this a new name for our colonial?

Some detail pen sketches, 146, by A. W. Brunner, are faithfully executed; also a pretty little bit, No. 138, by Renwick, Aspinwall & Russell.

The Washington apartments in Kansas City, by Bruce Price, is one of the most successful buildings, and shows serious work. The same may be said of Messrs. Burnham & Root's design for a bank building, rendered in a broad manner, by Paul C. Lautrup. More serious work is shown in the three competitive designs for the United States Trust Co's new building on Wall street. The successful design is a splendid piece of Romanesque as laid down by the late Mr. Richardson, but the drawing, though well done, does not do justice to the building itself, now approaching completion. It is the work of Mr. R. W. Gibson, architect. The other two are by Babb, Cook & Willard and Mr. R. M. Hunt, of New York. Mr. Hunt's design presents too many horizontal lines. No. 89 is a beautiful piece of color, and one wonders why it is hung so high; it is by Arthur Rotch. No. 90, a competitive design for the soldiers and sailors memorial at Indianapolis, is a good piece of color rendering and drawing, lacking a good design. No. 88, a view in Venice, by H. T. Schladermundt, will make a good thing when he gets it finished. At present it does not come within the limit of a sketch.

In the center of the long gallery, at the end of the room, is hung a frame, in which are some pen drawings of ruins in Greece and Asia Minor; they are done by F. S. Bacon, and are examples of finished draftsmanship in pen and ink.

One might keep on noting the many excellent bits of design and rendering in this room, but it is too much to enumerate, although with but few exceptions, they deserve it; but we must pass on to the Loan gallery. Here everything deserves to be spoken of, but it would be endless praise.

Passing through the draped archway, with the statuary on either side, one is ushered into the grandest effect in color that the human eye could ask to rest upon, and the hanging and arranging is beyond criticism. Almost everything in the room is richness itself. Many of the panels and decorative effects are by such artists as Dewing, Church, Tiffany, Blum, Blashfield, Mowbray, Kenyon, Cox and others too numerous to classify, all lending their best efforts to a grand and successful end.

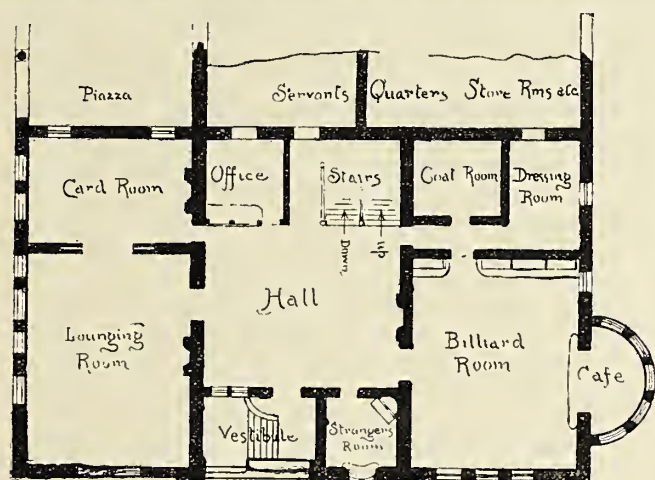
Before closing I would mention the catalogue of the League, which is certainly very artistic and contains many illustrations of the drawings on the walls. The League has cause to feel gratified indeed at this its fourth exhibition, and if such advancement goes on from year to year, architecture in this country will soon wear a new garb, and one worthy of it.

Interior Work.

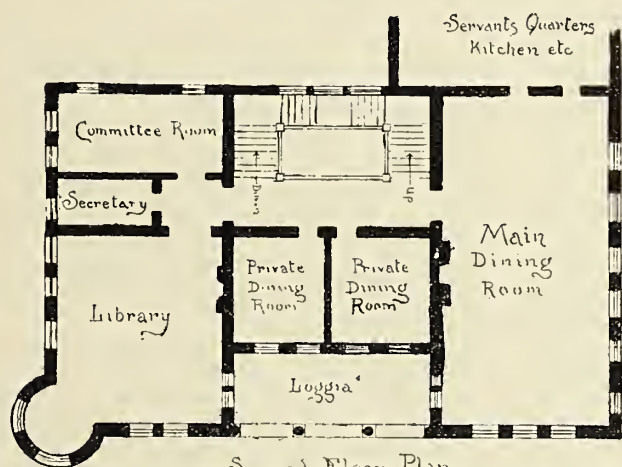
BY WILLIAM MORGAN PETERS.

CLUB FURNITURE.—Continued.

HAVING considered in a general way, in the December number, the requirements of furniture for clubs, the manner in which designs should be studied, general rules to be observed, and an outline specification treating of stock construction and finish, let us now take the special case of the Denver Club, of Denver, Colorado, as an illustration of the subject, and go through the public rooms, noting the requirements and the manner in which they have been dealt with. To give a clear understanding of the arrangement of the main rooms of the club, these sketch plans of the principal parts of the first and second floors are introduced.



First Floor Plan



Second Floor Plan

The bowling alleys and gymnasium are in the basement. There are thirteen bedrooms on the third floor, for the accommodation of members. The servants' quarters, kitchen, laundry, pantry, storerooms, etc., are all in an L in the rear, perfectly convenient, and yet completely isolated so that no noise or smell will ever trouble members.

It is intended, eventually, to fit up a large space just below the roof, with a stage and all accompanying requisites, and use the spacious hall thus made for theatricals or balls.

For convenience, comfort and good general interior effect, this club house has no superior in the country, and the architects, Messrs. Varian & Sterner, of Denver, are to be congratulated on the result of their labors. To return to the consideration of the principal rooms: Passing up two steps from the sidewalk, under a heavy Romanesque arch, we turn at once to the right ascending a few more steps to the second level of the recessed vestibule; an oak door opens in front of us, and we step at once into the entrance hall; a low studded room, 33 by 28 feet, finished in quartered white oak, with an oak floor, heavy ceiling beams and cornice, and a high paneled wainscot all around the walls. Directly opposite the entrance are the stairs to floors above and basement, which, with the office, take up this whole side of the room. To the right is a large carved stone mantelpiece, very massive, with iron firedogs on which whole logs are burned. At right and left of mantel are doors to billiard room and coat and dressing rooms. The doors on opposite side of hall open into the lounging and card rooms.

This hall is, on account of its surroundings and requirements, merely an introduction to the rest of the building; but, although it will be used

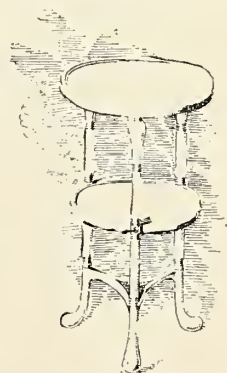
chiefly as a hall, that is, not to any extent as a room to sit in, it is very desirable to give it an air of comfort that would make one feel at home on entering, and this effect can be greatly increased by the introduction of suitable furniture. To this end, three conversation, or "S" chairs, were introduced, and also five very comfortable all-wood arm-chairs; a settle, which is fairly comfortable, and two very large high-back chairs standing on either side of the fireplace, which are chiefly for effect; these, with a bench for servants, and a very handsome, tall clock, finely carved, with delicate Romanesque detail, having a face of hammered iron with hands, figures, pendulum and weights in polished brass, complete the list of furniture, which is all made in quartered white oak, covered in natural tanned leather, very heavy, secured with large iron nails.

Passing into the billiard room, we find a light, spacious hall, 36 by 28 feet, with hardwood floor, and having finish and wainscot of ash, and ceiling crossed by heavy wood beams. Directly in front of us is a large semi-circular bay of about 9 feet radius, having five windows, with floor raised one step above main level of room. Two small tables, with several drinking stands and numerous chairs are set next the windows, where members may indulge in a glass of wine, with perhaps some light refreshments, amusing themselves meanwhile by watching either the passers-by outside or the billiard playing inside. Across the lower end of the room, also on the platform, are luxuriously upholstered seats covered in corduroy, with an occasional arm terminating in a small table, or tray, which is used to set glasses or ash-holders upon. There are two pool and two billiard tables on the floor, beside a dozen or more high chairs against the walls, with ample space besides for players and spectators.

Next in the rear are the coat rooms and dressing rooms, and back of this again the servants' quarters, storerooms, etc. Immediately to the right of entrance is a small room for the accommodation of callers, a snug retreat, with corner fireplace, window seat and easy chairs. To the left of entrance, on the front corner of building, is the lounging room, 36 by 28 feet, having wainscoted walls, a large, open fireplace, and six large windows, affording ample light for all purposes. A soft, rich, Axminster carpet deadens all sound of feet, and the quiet, antique coloring harmonizes perfectly with the cherry finish and furniture. The latter comprises one large center-table, 12 by 5 feet, with second shelf below; two writing desks, conveniently arranged for paper and all requisites, having ample leg room underneath; three luxuriously upholstered 7-foot sofas, with ten arm-chairs to correspond, made very low, large and comfortable, and having backs of two different slants; twelve chairs with wood arms and flat upholstery, for the use of those at tables or desks; all are covered in heavy worsted gobelin tapestry, secured with large antique brass nails. One 4½-foot circular table, which stands opposite entrance door, and is to be used for a round game of cards when desired, with eight 16-inch circular stands, having the top shelf hollowed out to prevent the spilling of drippings on the carpet; a second shelf below for ash-holders, feet of solid bronzed iron, very heavy, to prevent possibility of upsetting.

The above completes the list of furniture for this room, which, as its name would indicate, is an extremely comfortable and delightful place in which to take one's ease. Sliding doors open from the lower end into the card room, which is also finished and furnished in cherry. Here is another open fireplace, and four large windows, two of which are French casements, opening out onto a spacious covered piazza in the rear, where members can sit on a hot night and have the benefit of whatever air is stirring, at the same time being screened from view of the street by vines which are trained on trellises. Five card tables, 3 feet 4 inches square, with rounded corners and a circular-paneled center, cloth covered and padded up about 1¼ inches at the middle, with one chess table, having a top inlaid in satin wood and mahogany, form the accommodation for players. Sketches of these tables and the twenty-four card chairs were published in the last number; the latter are very comfortable, having cane seats, covered with perforated leather and leather on backs, all being secured by brass antique nails. Eight of the drinking stands before described complete the furniture.

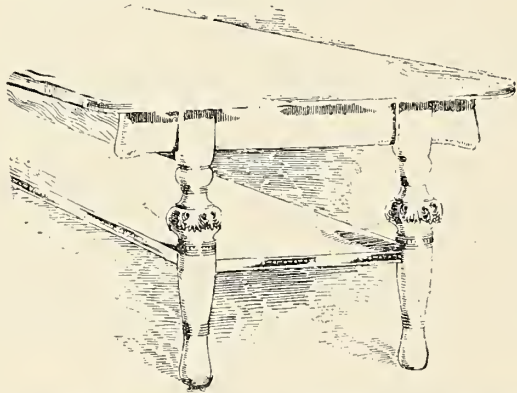
Passing out through the hall by the office, we ascend a handsome oak staircase, of imposing proportions, on which are large windows, throwing a flood of light into the halls both above and below. Passing under an arch to the right, on second floor, we enter the library, a high, studded room, 28 by 36 feet, lighted by seven large windows, two of which are in a circular oriel on the front corner of the building. This room is finished in Oregon cedar, and has a large chimney piece incasing the breast to the line of frieze. A rich Axminster carpet, of Oriental design and coloring, covers the floor. The furniture is in white birch, covered in Oriental-



figured moquette, and consists of the following pieces: About 44 feet of bookcases, 5 feet 3 inches high, which height allows of pictures being hung on the walls above them; one table, 4 feet 6 inches by 8 feet, for papers and magazines, the current numbers being placed on the top, and back numbers just below them on the under shelf; another table, 4 feet 6 inches by 10 feet, with movable paper racks in the center divided to fit stationery, with places for pens and inkstands; one writing desk, similar to those in lounging room; one 6-foot sofa and eight arm-chairs to match, luxuriously upholstered and extremely comfortable and capacious; ten wood arm-chairs, to be used mostly at tables, with five of the drinking stands, make up the complete furnishing.

Next to the library in the rear is the secretary's room, and back of this again is the committee room, with long table and chairs for members. Opening from the center of hall are two doors to private dining room, both being wainscoted to the height of 6 feet; the smaller of these is 18 by 16 feet, and both finish and furniture are in quartered sycamore with chair coverings in figured moquette. Furniture consists of a large corner buffet, with cupboards below and shelves and mirrors above; one extension table 6 feet by 4 feet 6 inches when closed, made to extend to 10 feet, and ten comfortable dining chairs. The large private dining room has finish and furniture in Mexican mahogany, with chair coverings in a rich antique gobelin tapestry. All metal in both rooms is in old brass; a corner buffet as in an adjoining room; a 6-foot circular table, having two extra tops 8 feet and 10 feet in diameter, to go on over fixed top, made in whitewood, and fastening securely to place by buttons which clamp under the edge; these pieces, with sixteen dining chairs, complete the accommodations. The four French casement windows open from these two rooms, together with two from main dining room, and two from library, onto a loggia, where members can enjoy an after-dinner smoke in the fresh air.

The main dining room, 56 by 28 feet, high studded, wainscoted in antique oak to the height of 7 feet, with wood cornice and beams on the ceiling, a high mantel with paneled breast, brick facing and wrought-iron



fittings, is the last of the rooms to be considered. A large double door gives entrance from the hall, to the left of which, and also at the right of mantel stand large 8-foot sideboards, with cupboards and drawers below trimmed with massive wrought iron hardware, having a French plate mirror on back, above which is a shelf for glassware, etc. A 7-foot side table, with shelves and drawers, finishing above similar to sideboard; two extension tables, 6 feet by 4 feet 6 inches when closed, to extend to 20 feet; in case of a banquet these tables will extend the whole length of room when set together; one whitewood top, 8 feet in diameter to go on over either table to be used as a social table for those members who come in by themselves; four 4-foot square tables for use by a party of four people; eight tables, 3 by 4 feet, around sides of room next to windows for the accommodation of two or three people each, as desired; eight tray-stands for the waiters, and fifty-nine very comfortable and light dining arm-chairs, covered in sole leather, fastened on with iron nails, complete the furnishing of the room. The thirteen bedrooms on the floor above are each furnished with a brass bedstead, a dressing case, a washstand, a table and two chairs; five are in antique oak, four in quartered sycamore, and four in cherry. The wall and ceiling surfaces throughout the house are treated in plain, quiet tints to harmonize with carpets and coverings, the windows being draped with valances or curtains of rich material, but perfectly plain in design; the whole building is lighted by electricity, and electroliers in wrought-iron, copper and brass, form attractive features in the different rooms. The house is furnished with all modern conveniences; is thoroughly heated and ventilated, and presents a most home-like and attractive interior.

In the text column of this number are sketches of the drinking stands and lounging room tables, and the illustration pages show dining room sideboards, with hall settle and bench on one page; the lounging room easy chairs and table chairs, with the hall high-backed chairs and conversation chairs.

Boston Sketches—Business Buildings.

BY C. H. BLACKALL.

IT is not altogether easy for a stranger to acquire a clear idea of the commercial buildings of Boston. The present business center of the city lies along Washington street, in the midst of so confused a maze of crooked passages and winding thoroughfares that there are few localities calculated to show a building off to advantage. Envious detractors of the tight little Puritan city say her streets were never laid out at all, but simply followed the lines of the colonial cow-paths; and one who undertakes to follow short cuts in any direction from Dock square will be quite convinced that those pre-revolutionary cows must have been exceedingly erratic in their wanderings. All of this irregularity, of course, has its charm, and is so integral a feature of the city that one would hardly wish it otherwise, though it does sometimes interfere with the symmetry of a design and check the tendency toward monumental treatment which one naturally thinks of in dealing with problems so matter-of-fact and prosaic as commercial buildings are apt to be. Still, the winding streets, with their unexpected vistas and abrupt turnings, lend themselves so happily to any attempt at picturesque treatment that when the architect is able to fit his design to the irregularities of the site, the result is apt to be more pleasing than if the streets were as regular and straight as in Philadelphia; and the occasional small squares, or the open spaces where streets cross at a slight angle, afford opportunities such as would hardly be found in a city less irrationally laid out.

The great fire of 1872 destroyed in a day the larger part of the business portion of the city. From an esthetic point of view, it is almost to be regretted that such a clear sweep of the field could not have been delayed a few years, when the architectural force in the city would have been better able to undertake the task of rebuilding. Still, the result would perhaps have been no more satisfactory, for, after all, the majority of buildings erected now-a-days in this country are unsatisfactory. The really successful ones are always in the minority. But it does seem as though Boston architects would do better today if they had another chance such as was offered in 1872. The buildings of the burnt district, as a whole, are not much of a credit. Perhaps the present generation of younger architects ought not to boast itself too confidently, in view of what judgment a succeeding generation may pass upon the works of today; but looking over the list of good or interesting business work, it does seem as though the art side of the profession had been making a more emphatic progress during the past eight years than during the corresponding period immediately following the fire; for while two of the best commercial buildings in the city were erected more than ten years ago, a dozen no less praiseworthy structures have not been in existence six years. Indeed, some would go even further, and claim that the erection of really good first-class office and mercantile buildings has only just begun in Boston, and that the next decade will witness a great change in the down-town street architecture. Changes there certainly will be, for most of the buildings which now serve for commercial purposes are so small and inadequate to the necessities of business that they will have to be rebuilt on a larger and more comprehensive scale. It is to be hoped that the opportunities may not be wasted. Boston certainly offers a field for a good architect, such as can be found hardly anywhere else. There are numbers of large buildings to be erected; there is plenty of money, an appreciation of what is really good in architecture, and the best of mechanics to carry out the conceptions of the artists. With such conditions, it will be the fault of no one but the architects if the growth of the next decade is not all that could be desired.

Comparisons are always dangerous as aids to criticism, and where criterions differ so widely it is hard to establish any measure of the artistic success of a building. Still, there is hardly a building in the city more generally liked than the structure in postoffice square, erected by the New York Mutual Life Insurance Company, a sketch of which is published elsewhere in this issue. It is built entirely of white marble, which alone gives a design worth in the eyes of the uninitiated, and is a very pure, consistent treatment of the modern French Renaissance, with the exception of the tower, which blossoms out into a curious blending of Gothic and Classic motives very pleasing in effect, and harmonizing nicely with the general façade, notwithstanding the incongruity of style. The tower is one of the most striking features of the business portion of Boston, and is very happily located, rising over the front toward the square, and centering on the lines of several streets in the neighborhood. There is a view of the tower to be had looking down from Beacon Hill through School street, with a foreground of the low shabby-genteel structures along Washington street, flanked by Parkers' and a corner of King's Chapel, and the pure, white silhouette of the tower rising in the distance, with soft, blue shadows and glints of gold from the finials—a view that an etcher might illuminate with his needle and imagine he was transcribing a bit of Venice. This building

is said to be one of the most expensive for its size in the country. Nothing was stinted or slighted, within or without, that money could supply. The interior is very well arranged as to plan, though the effect of the hallways is not as satisfactory as the exterior of the building. The architects were Peabody & Stearns, and it is interesting to note that this is almost the only instance in which they have employed the French Renaissance style for a large building.

A marked contrast to this, in every way is the store building for R. H. White & Co., erected by the same architects. The building has a wide front on Washington street, built a number of years ago, but the extension toward the rear, on Harrison avenue, though, perhaps, intended to be of minor importance, is the one which awakens the more interest for its architecture. A sketch of it is published with this number. A simpler motive could hardly be devised. In the first story are plain, rectangular openings over which a heavy stone belt course is carried across the front. Above is a range of heavy brick piers, carried through three stories, with broad arches connecting the pier caps. In the upper story the rectangular openings are repeated on a smaller scale, and instead of a cornice, the parapet is simply corbelled out slightly and capped by a heavy stone roll. There is no elaboration whatever. The arches are turned with a number of 4-inch rowlocks, and the effect, instead of being petty and mean, is broad and simple, as though the plain wall surface were turned over in the arch. If we could only at all times remember how effective is a plain masonry wall, how many regrets and mistakes we might be spared. Here the whole success is in the simple proportions, and it is impossible for any sketch to correctly portray the solemn dignity of these quiet masses. The solid, substantial effect is heightened by the treatment of the corner entrance, where two huge stone columns, wholly detached on all sides, bear the entire building, as it were, on their broad capitals, the entrance being deeply recessed from both sides. A more majestic example of modern Romanesque treatment can hardly be found in the country.

The ladies' parlor in this building is well worthy a visit. It is a room about 42 feet square and 25 feet high, the floor laid with tiles and a broad band of Venetian mosaics, the walls covered with high oak dados, above which are stucco plaques modeled in low relief and treated in shades of dull gold, while the ceiling is heavily coffered in oak. A huge Victoria marble fireplace, large enough to roast an ox, occupies the greater part of one side of the room, and on another side are two large windows filled with glass by Lafarge. The oak is stained a dark, dull green. Such a room must, of course, be considered somewhat as an advertisement by an enterprising dry-goods firm, and a certain amount of flourish and dash is to be expected; but beyond this it has some very interesting effects, both in color and design, and as a consistent attempt in the style of the Romanesque, is quite successful.

Peabody & Stearns are just completing a third structure, the Fiske building, on State street, which has occasioned a great deal of favorable discussion, and promises to be in some respects the best of the work by this firm. It is a ten-story office building, with a frontage of 70 feet or more on State street, built entirely of a beautiful pink granite. All the details are huge and massive; the openings are mostly rectangular, with heavy granite mullions and transoms, and without in any way sacrificing the considerations of design. It is a sensible, straightforward building; well lighted, well built, and good looking. It is crowned by a steep slate roof, rising in a square pyramid about 70 feet high, and crowned by a cupola 214 feet above the ground. This is the first excessively high building which has been erected in Boston, and it seems to be the beginning of a new dispensation, for several structures equally high are already proposed, one of which, the Exchange Building, is to cover over 30,000 square feet. Boston, the staid old conservative city, has been a long time coming into the line, but is at last beginning to work skyward in the same lines as New York and Chicago.

A third structure, illustrated on the sheet of sketches, is the Hemenway Building at the corner of Court Square and Tremont street, by Winslow & Wetherell. The late N. J. Bradlee, who was until quite recently a senior member of this firm, made his reputation as an architect not so much by the esthetic qualities of his designs as by the thoroughness of construction and care in planning which he secured. Both of these qualities are marked in the Hemenway Building, together with an excellence in design which it is only fair to ascribe to the younger men. The lower story is one large store, and is treated as such, having wide show windows and heavy iron columns, not esthetically connected with the superstructure, which is built of pressed brick, with brown sandstone courses, quoins, etc. All of the openings are rectangular, a form which will insure the greatest amount of light to the interior, and the early French or François I style, lends itself admirably to such a treatment. The horizontal divisions of the exterior are very pleasing in this case. They are handled easily and naturally; the cornice is kept one story below the roof, so as to avoid the necessity for greater depth; and, excepting the attic story, which does not

seem altogether happy in its proportions, the design is very restful and pleasing.

Winslow & Wetherell have built two large newspaper buildings adjoining each other on Washington street, just above State, occupied by the *Globe* and the *Advertiser*. The former, an extension to which has just been completed, has a red sandstone front not unlike that of the Hemenway Building, though simpler in detail; while the *Advertiser* building is built of white marble, in Venetian, or perhaps more truly Siena Gothic. Both buildings have a deep, recessed front in the first story, but in the one the opening is spanned by a wide, pointed arch in white marble, while in the other there is a heavy iron girder. It is quite interesting to compare the two buildings. The main lines and heights of stories are the same in each; the problem and requirements exactly the same, though the results are by no means the same. One has arches and the other straight lintels. One has columns and carved capitals, the other plain jambs with beveled quoins. One design represents the picturesque, artistic treatment; the other, a stern, practical disposal of the question. The color of the marble and the carvings would incline the average observer toward the lighter design, and yet it would be hard to say which, all things considered, is the better design.

The Phillips Building, opposite the Park Street Church, by the same architect, is a quiet design carved out in buff Nova Scotia stone in the same style as the Hemenway Building. It should be studied for the effectiveness of the divisions of the façade, and for the planning of the office stories, though the general effect of the exterior is less pleasing than either of the preceding buildings.

The late Mr. Richardson left but few marks of his genius in Boston in the lines of business buildings; and this seems rather strange in some respects, for his talents were always fully recognized here and there was no lack of opportunities. Perhaps the conservative element, which is always so pronounced in everything which has to do with Boston and Boston work, was inclined to look askance at the bold innovations in style which Mr. Richardson so frankly advocated, and in which he often disregarded too royally the limitations of the so-called practical considerations of design; though for that matter all architects might profitably follow his example in this latter respect. At any rate, there are very few important commercial buildings which were designed by him. The store building for John H. Pray, Sons & Co., of which a sketch is published herewith, is generally ascribed to him, though possibly his successors, Shepley, Rutan and Coolidge had a larger share in the design. The motive is an excellent one; the broad piers, the wide browed arches and the bold, machicolated cornice are well proportioned to each other and very effective in general effect; and yet it is hard to believe that Richardson would have carried boldness so far as to extend such wide archings around a curved corner, and on an acute angle at that. It used to be considered a fundamental principal of every design that it should be true to its construction; and while a round arch can be built over a circular plan and perhaps be perfectly safe, it never looks quite right, and always conveys an indefinite idea that there are some heavy iron beams and tie bars tucked away somewhere behind the masonry, and that the ponderous arch is too weak to be trusted even with its own weight; so that however effective the scheme may seem it does not satisfactorily bear a close analysis. At first thought the whole subject of architectural criticism appears to be too indefinite and complicated to admit of any real reasoning, so that it seems to reduce to mere expression of opinion, and, indeed, that is what it usually becomes. And yet, as one studies the work of former building epochs to which time and general assent has given a standard of excellence, it is seen that every effect, every arrangement of detail, every feature of the design can be traced not to caprice or fancy, nor to a mere blind following of tradition, but, in the majority of cases, and certainly with the buildings which are most universally admired, to some definite, practical necessities of construction or of plan. Our buildings of today can hardly be measured by medieval standards, and yet it would seem to be a safe development could we always keep consistently within the lines of simple, straightforward construction. Mr. Richardson, it is said, seldom troubled himself about actual construction, and yet, in nearly all his work, there is an appreciation of what construction means, in an esthetic sense. The design hangs together without any suggestion of hidden girders or preventive ties.

The Ames Building on Kingston street, by Mr. Richardson, has been very fully illustrated in the architectural papers, and is doubtless known to most of the readers of this journal. It is a very elaborate example of Romanesque, and is considered by some as one of the architect's best attempts. The front is laid out on a broad polygonal sweep, rounding into the two streets, with great, wide arches, and picturesque dormers rising from a steep roof, though with a disposition of the motives which does not seem as suitable for its purpose as Mr. Richardson's earlier block in Hartford, the details here, however, being much better studied and the

general effect more harmonious. The façade is entirely of brown sandstone.

There is another street front by Mr. Richardson, on Washington street, near West, which should be studied by those who would acquaint themselves with the work of the city, though this example hardly strikes one as favorably as the Ames Building. The building is entirely in pale buff sandstone, a departure from the red sandstone which has grown to be almost a necessary feature of Romanesque work.

The list of good and interesting commercial work might be extended almost indefinitely. There is a cleverly designed brick and terra-cotta front opposite the Providence depot, the premises of the Bay State Safety Deposit Company; the new Boylston Market Building, by Carl Fehner; the Tremont Bank Building on State street, by the same architect; nor should some of the older structures be neglected. It is not the fashion today to design a building in the style of the Equitable, on Devonshire street, a heavily treated façade in granite, with Classic orders arranged over each other, and a high mansard roof—a style, in fact, which possesses many bad features, but which in the hands of the late Mr. Gilman has lent itself to a grandeur and dignity, a breadth of treatment, and a largeness of scale such as few architects succeed in imparting to their buildings. This is one of the instances in which a street front may be interesting without being really good; and another is the building at the corner of State street and Washington, in which the whole is treated rather as a tower than a building, the windows clustered in the center of each façade and carried up through several stories, with great, wide piers at each corner, ten feet or more across, and a huge, overhanging, Florentine cornice. It is a building in which the idea is so good that it is a pity it should not be coupled with better studied and more knowing details.

There is going to be a grand opportunity for Boston architects, should the city continue to grow at the rate it has during the past ten years. The portions of Tremont and Boylston streets, inclosing the common and the Public Garden on two sides for a distance of about half a mile, must some day be entirely rebuilt to meet the demands for business premises. Could these streets be lined with continuous rows of tall business blocks, as well designed as those which have been noted in this paper, it would be an achievement in the art growth of the city of which Boston might well be proud. The world moves in Massachusetts, in spite of conservatism and the clinging associations of our sturdy, self-satisfied ancestors. The movement may not be as brisk and soul-stirring as it is in Chicago or Kansas City, and there may not be the same bustle and drive, but there is a quiet growth which is no less satisfactory.

An Extraordinary Lift with Block and Tackle.

PERHAPS the heaviest stone ever lifted by block and tackle in this country, as well as the largest stone ever transported by rail, was the shaft of the Wentworth monument, successfully erected at Rosehill Cemetery, near Chicago, December 21.

The monument is a monolith obelisk, measuring $4\frac{1}{2}$ feet at the base and 50 feet high, and weighing about seventy tons. The pedestal upon which this monolith rests is 16 feet 3 inches in height and composed of six pieces. The principal stones in this are the first base, which is 18 feet square and 2 feet thick, weighing fifty-seven tons, and the die block, which is about 6 feet cube and polished. This will bear the inscription. Its weight is about twenty tons. The material of the monument is Hallowell Maine white granite, and the work of quarrying the stones and of transporting them fifteen hundred mile was no ordinary problem. The first base was sent by water by way of New York, the Erie canal and the great lakes, and was transferred four times. The obelisk was carried on special cars by special train on the Grand Trunk Railway, traveling only by daylight, and at a rate of not over ten miles an hour.

The foundation is laid 14 feet below the surface, and rests on a gravel bed of considerable depth. It is 20 feet square at the bottom, and the first course is concrete 4 feet in thickness, above which it is constructed of rubble masonry.

The obelisk was raised into position December 20 and 21, the pedestal having already been set several days. The apparatus used was a large side derrick, consisting of two masts 2 feet in diameter and seventy-eight feet high. These were held together at the top by a crosshead or lintel of oak 17 inches square. The derrick was kept in an almost perpendicular position by iron wire guys 1 inch in diameter—three at the back, one at each side and three in front. Hanging from the head of the derrick were two tackles, having two four-sheave blocks to each tackle. These blocks are made of forged and cast iron. The fall used in these blocks was English steel wire rope 1 inch in diameter. After passing over all of the sheaves in the big blocks, the fall was run through a lead block at the foot of each mast of the derrick and thence to the drum of a compound winch. The power of these machines is such that one man on each machine could raise seventy tons. The tackles were made fast to the obelisk with a large manilla strap, and to insure the safe holding of the straps two bunches of stone were left on opposite sides of the obelisk and under these were bolted two heavy oak timbers. The time occupied in the raising from the time it left the ground was two hours forty minutes, everything working with perfect smoothness and carried out exactly as planned. These tackles were designed by Mr. Bodwell, the Chicago agent of the Hallowell Granite Co., and are of sufficient strength to raise one

hundred tons with perfect safety—stronger than was necessary for this undertaking; but some future work may test them to their full capacity. A photogravure print in this number illustrates the machinery and the obelisk when nearly raised to the required height.*

Chicago Architectural Sketch Club.

THE members of the Chicago Architectural Sketch Club assembled at their rooms in the Art Institute Building on the evening of the last day of the year. After participating in the bounties of the buffet, prolonged by social intercourse, President W. G. Williamson called the meeting to order in the following words:

President Williamson: Members of the Sketch Club, the object of our meeting tonight is simply to receive Mr. Robert Clark, the liberal donor to our club of \$1,000, for the purpose of establishing a fund to supply a gold and silver medal to be awarded in competitions of the club, to members who are under thirty years of age. The idea is, as I understand it, to invest this \$1,000 at six or seven per cent, and the interest thus derived is to be expended in these medals. Mr. Clark is present, and we would be pleased to hear from him.

Mr. Robert Clark: Mr. Chairman, I am somewhat at a loss at what I shall say. I'm an old man sixty years of age, but I'm something of a young man too. I believe in the progress of art. I believe in the scintillations of genius. I believe you young gentlemen whom I see about me, and some of you may be married young men for all I know, have a grand future before you in the development of your own individuality. Although I have traveled and seen art work abroad, I am impressed with what I have seen here this evening (alluding to the sketches and drawings on the walls). I have seen the best galleries of paintings, sculpture and statuary there is in the world, and I say to you young gentlemen I believe the people of this western continent, through their spirit and genius, will work out a grand future in art, not by copying the works of the masters of the Old World, but gleaming from them an inspiration that will produce better results.

The genealogy of art says to you simply this: If you have a conception—no matter what the conception may be—whether it be to sketch a building, to paint a sheep or a horse, or maybe an ass, do the best there is in you and strive to do it better than anybody else. If it be an ass, let me say, gentlemen, with all due respect to you, an ass is about the worst quadruped you can tackle in art because of his self-esteem. You can't take any advantage of such an animal. Art has to deal a great deal with animals. Man is an animal; woman is an animal; children are simply undeveloped animals; so whether it be the animal man, or the animal horse or jackass you are going to illustrate, your genius must find its exposition in the surroundings as well. This is the great thing, and your man, horse or ass is not complete until you get in your surroundings. I saw a gentleman today whom I met last Friday, when he said he was going to hunt rabbits. I met him today and I asked him what was his conception of rabbits. Said I, "did you get any rabbits?" Said he, "Oh lots of them." "Anything else?" "Yes," said he, "we got six wolves!" "Six wolves," said I, "and what did you do with the six wolves?" "Oh," said he, "we skinned them and sold their scalps. There's a premium on them of 12 shillings a head." You see that was the commercial value, and while he was doing a grand work of extermination by the art of gunnery, he also looked at it from a commercial standpoint. Now, this is in a certain sense true of your calling, gentlemen, and while you are endeavoring to produce the best in art don't forget the commercial surroundings. But why should I attempt to say anything to you who are more intelligent on this subject than I. I am simply an old blacksmith, born in 1829, and went into a blacksmith shop when I was thirteen years old, and I had the advantage of working there under the supervision of my own father—and it was a very good supervision, too, for he never would let me say a thing was right until he examined it and saw that it *was* right. I'm a blacksmith today, nothing more. I came to Chicago in 1849, and began work at 10 shillings a day. A shilling at that time was $12\frac{1}{2}$ cents. I was not satisfied with that, and soon got 15 shillings. After awhile, I made \$2.15 a day. There's where the development comes in. I had no art; simply my hands, and by these hands alone I have accumulated my personal possessions. I am simply an old blacksmith who has a slight appreciation of art, and who wants to do what he can toward its development in his adopted country. I want to say again that I have visited galleries in England, Scotland, in Italy and in Paris. I have visited the Vatican, and I tell you here, that so far as the marks of genius are concerned, there is nothing better there, nothing better, more promising than what I see upon the walls about me. And right here in this western world, gentlemen, is where we are going to have a development of art such as the Old World never dreamed of. I don't know that I have anything more to say.

Secretary C. A. Kessell: Mr. Chairman, I don't see that we have too many honorary members, and I do not think we can do a better thing, or honor ourselves more than by adding a blacksmith to our preferred list. I think we need a blacksmith in our organization, and I would like to nominate Mr. Robert Clark as an honorary member of the Chicago Architectural Sketch Club, and I make a motion to that effect.

The motion receiving several seconds, was carried by a spirited acclamation.

Mr. Robert Clark: Mr. Chairman and gentlemen, permit me to say, I feel myself highly complimented by this honor which you have conferred upon me, and I shall consider it my studious business to see that you shall not be without a blacksmith who knows how to work. (Cheers.)

President Williamson: I see Mr. Enders, who has honored the Chicago Architectural Sketch Club by winning the medal of the New York League, is present, and I suggest he interest us a short time with his feats of leger-demain. Will Mr. Enders please come forward?

Mr. Oscar Enders: Mr. President and gentlemen of the Sketch Club, my joy knows no bounds. You can all imagine how a young man would

* By an accident, a photograph showing the winches, which were situated about one hundred feet from the derrick, was destroyed, and necessitated the use of another view.

feel being the possessor of a medal won in a competition. You are all well aware that I, one of your fellow-workers, have been successful in the New York League competition, and right here I will say I owe all to the Chicago Architectural Sketch Club. If I had staid where I was four years ago, I would have been nothing more than a vampire draftsman. An institution of this kind can do a vast amount of good. It incites one to progress in design and construction, and affords the glorious opportunity to argue the intricate points of the profession. Having delivered myself of this wisdom, I will mention I have brought with me this evening my little bible (a pack of cards). Perhaps some of you have seen something similar before. I will endeavor, by special request, to amuse you with it.

Mr. Enders then entertained the meeting with a number of very dextrous tricks in cards, equal to the best performance of the best prestidigitators.

After some further remarks Mr. Clark said: There is nothing in my life-long experience I cling to with more satisfaction than the providing in this way for competition medals for you young gentlemen, and in connection I will say further that I will provide the dies to strike them after the design has been settled on and furnish the first two medals—the gold and the silver one, at my own expense—all the rest I will leave to you. (Cheers.) While I have simply taken the initiatory in saying, gentlemen, here is \$1,000, before ten years is over this will be over \$500,000. I will say, moreover, while I have given \$1,000 only, now I don't know how much more I'll give in the near future. It will be multiplied by five anyway. Now I know this has turned into a sort of mutual admiration society, and still I am not asking to be admired, as there is nothing startling about me, save my blacksmith hands, although I haven't done anything in the shape of blacksmithing for the last five years. However, I want to say to you, I am with you—the rising young men of the architectural profession, and when I see what you are doing on looking around this room, I say to you if I should die tomorrow there is \$5,000 for the Architectural Sketch Club of Chicago. (Cheers.)

Mr. R. C. McLean: Mr. President, can you tell us anything about the result of the Architectural League competition? I understand Mr. Phimister has also provided a medal to be competed for.

President Williamson: Mr. Phimister has kindly volunteered to give a \$50 gold medal, to be competed for this year by the club. This will be in addition to the medals contributed by Mr. Clark.

Mr. D. G. Phimister: Mr. Chairman and gentlemen, I am no speaker, but I have got a word or two I would like to say in regard to this medal question. I was sitting at dinner with Mr. Williamson. It was, I believe, previous to Mr. Clark's donation, and we were talking casually of the club, when it came into my head that your young men would be benefited by having a medal to be contested for, and under the impulse of the moment, I said I would give a \$50 gold medal to be competed for. My idea was that the competition should be confined to the members of this club. However, I am perfectly willing to leave that to your own discretion. I am ready to give the \$50, and you can use it as you see fit. I feel that I am almost one of you. I have attended nearly all of your banquets, and hope to again enjoy your hospitalities. I haven't anything prepared for a recitation, but I've got a little piece which I will give you in compliment to my brother Scotchman, Mr. Clark. It is entitled "Auld Scotland's Flag."

The recitation was well given, and received bounteous applause.

President Williamson: Will ex-President Beaumont make us a few remarks?

Mr. Geo. Beaumont: I could not help thinking, Mr. President, when Mr. Clark brought up the vocation of the blacksmith, of the name of Jan Matsys, whose handiwork and genius is displayed in the ironwork of the Antwerp Cathedral, and is today a thing of beauty, attracting the attention of the art lovers of the world; also of the wonderful blacksmithing to be found at many other cathedrals and classic buildings of the Old World, of which there is nothing equaling it today in masterly execution or artistic genius, which shows how nearly allied to the calling of the architect was the blacksmith of olden times. I thought, too, of other notable blacksmiths—of Stephenson, the locomotive inventor; of Elihu Burritt, "The Learned Blacksmith," and of Longfellow's "Village Blacksmith," and I thought Mr. Clark had occasion to be proud to be found in such goodly company. With regard to Mr. Clark's donation, I can assure you, as one of the members of this club, I deeply appreciate it, and I see in it, perhaps, the nucleus of a great architectural school in this city. Why can we not have an architectural school here in this metropolitan city worthy of its position, and not compel our young men to go to some small city at a distance to acquire his architectural schooling? There is no reason in the world why we should not have a school in this city that shall be second to none anywhere.

President Williamson: Mr. McLean, will you favor us with a few remarks?

Mr. R. C. McLean: Following the remarks of Mr. Beaumont, I will tell you, gentlemen, that some three years ago a school of architecture was contemplated in the city of Chicago, but I can tell you at present very little more than that. Three years ago next spring a number of architects and myself held, I think, three meetings in regard to establishing such a school. There was no definite plan formulated, only a general scheme outlined, and that was about as far as we got. We did not find any Mr. Clarks to give it an impetus, as this sketch club has, and whose generosity may be a nucleus around which funds for the establishment of such a school will be gathered. There is no reason why Chicago, which is the center of the West, should not have a school of this kind—a school where nothing outside of architecture is taught. It should be a representative school, different from other schools throughout the country—unlike the School of Technology at Boston, in that it be a school of architecture, pure and simple. But no matter how good a draftsman may be, he ought to have a thorough training in a properly organized architectural school. I know, by way of refutation of this position, you might say Mr. Mundie and Mr. Enders, who have taken the second prizes in the last two competitions of the New York League, have neither of them attended any architectural school, and

therefore it is not necessary that those of equal genius should. Yet, notwithstanding that fact, I think that every draftsman, before he can become thoroughly qualified to pursue the responsible occupation of architect, should become possessed of all the possible knowledge pertaining to that profession attainable. Unsupported by such information, he can, at best, but acquire architectural knowledge in a desultory way, but supported by it, however great his natural genius, it cannot help but be augmented by a thorough course of training. It is my fervent hope to yet see such a school started here in Chicago, and I look upon Mr. Clark's contribution to this club, and his generous proposition to do more, as perhaps the stimulus that will induce others of our public-spirited minded men to interest themselves in such a project. I am free to confess that when the proposition is made the first question will be "will it pay?" and then how to organize the movement so that it will pay will be the problem that will be forced upon the projectors. It is quite evident to me that the money question will be predominant, at least to a large extent. It was a question I met three years ago when I went out to see my old friend, the president of the Northwestern University at Evanston, and endeavored to enlist his sympathy toward establishing a chair of architecture in that institution—telling him there was nothing of the kind in the West, and that there was a grand opening for such a school here that might include civil engineering. "My dear sir," said he, "you can't do it. The chair of chemistry was abolished in this school some years ago, and now, after much pains and labor, we have succeeded in having it recently reestablished, and that is as near as we can hope, at present, to get to the physical sciences." You couldn't get them to start anything in the way of architecture or engineering in this school; the directory cares more for the root of a Greek verb than they do for the whole of the physical sciences. I tell this to you to show the difficulty that has laid in the way of establishing a school of this character in the West, especially in Chicago. But we will overcome all difficulties. We will have a school of architecture in Chicago.

Mr. Robert Clark: Well, Mr. President, we will not only have an architectural school in Chicago, but we will raise an endowment fund for it. I stand ready today to place \$5,000 on that basis—I mean toward a permanent fund for a permanent school for the education of architects.

After some general discussion, in which Mr. Clark reiterated his practical interest in the education of draftsmen and the advancement of architecture in the West, the meeting adjourned.

Our Illustrations.

Foreign Sketches; B. Nolan, Rochester, N. Y., Del.

Public School, Memphis, Tenn.; M. L. Beers, architect, Chicago.

Boston Sketches, Part IV, Business Buildings; J. A. Schweinfurth, Boston, Del.

Competitive design for Boatmen's Savings Bank, St. Louis, Mo.; Burnham & Root, architects, Chicago.

Furniture designed and produced by William Morgan Peters, Chicago, for the Denver Club, Denver, Col.

Residence for Willard A. Smith, Rhodes avenue and Thirty-third street, Chicago; W. W. Clay, architect.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Monument of Hon. John Wentworth, with hoisting apparatus.

Denver Club building, Denver, Col.; Varian & Sterner, architects.

Residence of Dr. Luke Corcoran, Springfield, Mass.; Jason Perkins, architect.

View of Cincinnati Chamber of Commerce—four full page plates; H. H. Richardson, architect.

Soldiers' and Sailors' Monument of Indiana.

The commissioners of the State Soldiers' and Sailors' Monument of Indiana, at Indianapolis, submitted their seventh quarterly report to the governor, January 3, covering the period from October 1, 1888, to December 31, 1888. The report notes the payment of \$10,185.11 to Enos Hege on contracts for foundations, completed and covered, and the taking of a bond of \$5,000 from Gerald Johnston, as treasurer of the board. The suit of William B. Campbell to restrain the board from expending more than \$200,000 for all purposes on the monument, is referred to, and the court of last resort having decided against Campbell, the board will continue to draw upon the general fund of the state for incidentals, and reserve the \$200,000 appropriation and all donations for the structural work. Matters connected with the competition for designs, bids, etc., heretofore published, are further referred to. The expenditures for the last quarter were \$13,563.98. A letter received from Bruno Schmitz, architect of the monument, written from Germany, states that he expects to return January 20. He recently furnished to the commissioners a photograph of a plaster of paris model of the monument which he has made and will bring with him. The model is six feet high, and shows the stonework as it will be laid in work proper. Notice to vacate the rooms in the capital building they occupy was served on the commissioners yesterday. They have been occupying two or three rooms on the second floor of the state house, and think, in view of the accommodations afforded by that building, they might have been allowed to stay until their work was finished.

Now there is another rush of invalids like that of the consumptives who go to the abattoirs to be cured, says the New York *Sun*. This time the rush is by rheumatics who believe that they can be cured by standing near the dynamos in electric-light establishments. This new fad grows out of the idea that men employed in the manufacture or use of electricity never have rheumatism or neuralgia. It is said to be a fact, and another statement is that if a rheumatic gets work that takes him constantly beside dynamos his disease quickly leaves him.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Sixth annual convention will be held November 20, 1889, at St. Paul and Minneapolis. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1889, at Philadelphia. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the second Monday after the first Tuesday of every month. Annual meeting, October, 1889. O. J. Pierce, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next meeting at Rochester. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—E. O. Danse, Pittsburgh, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at St. Louis, on the second Tuesday in January, 1889. E. F. Fassett, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1889. Next meeting, August 14. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 8, 1889. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1889. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1889, at Dayton. F. J. Otter, Dayton, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting third Thursday in February, 1889, at Memphis. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Waco on the third Tuesday of January, 1889. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon or each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. G. M. D. Knox, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October in each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. C. A. Kessell, secretary. Annual meeting, November, 1889.

ARKANSAS SOCIETY OF ENGINEERS, ARCHITECTS AND SURVEYORS.—Second annual meeting November, 1889, at Little Rock. A. G. Gibb, secretary.

MICHIGAN STATE ASSOCIATION OF ARCHITECTS meets at Detroit on the first Thursday of each month.

CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

On January 8 the Chicago Builders' and Traders' Exchange will hold a meeting to elect a nominating committee, according to the following article V of the by-laws:

At the hour of 12 M., on the first Tuesday after the first Monday of January, the president shall call the members present to order, and the meeting shall proceed to election of a nominating committee of five (5), whose duty it shall be to nominate a member for each of the offices to be filled at the annual meeting.

That said nominating committee shall be elected by ballot; the member receiving the greatest number of votes shall be chairman of said committee; the other members receiving the greatest number in rotation shall complete the committee, whose duty it shall be to post the list of candidates nominated (printed on plain white paper) in the Exchange at least five days before the annual election day.

The annual meeting of the Exchange will be held on January 21. At a meeting of the Board of Directors of the Exchange, January 5, the following members were elected delegates to the convention of the National Association of Builders, to meet at Philadelphia February 12.

Delegates—George Tapper, chairman; D. V. Furlington, F. S. Wright, C. W. Gindele, Erastus Foot, W. P. Ketcham, William Grace, M. J. Sullivan, A. E. Wells, Thomas P. Henne. Alternates—Oliver Sollitt, W. T. Clark, E. V. Johnson, H. Appel, C. A. Moses, A. J. Weckler, J. G. McCarthy, James Eastman, M. Campbell, C. B. Kimbell, Thomas Moulding.

CHICAGO ARCHITECTURAL SKETCH CLUB.

At the regular meeting of the Chicago Architectural Sketch Club, January 14, the evening will be devoted to the discussion of architectural views of Egypt by members of the club. The first comprises over fifty

subjects and they will be shown by stereopticon by Mr. John K. Allen. The following is the syllabus for 1889:

SYLLABUS.

DATE.	SUBJECT.	NAME.
1888		
Dec. 3	Terra-cotta	F. Wagner.
" 17	Sketching from Antique.	
" 31	Reception to Mr. Robert Clark, donor of gold and silver medals.	
1889		
Jan. 14	Lantern Exhibit of Egyptian Views	John K. Allen.
" 28	A Few Practical Hints.....	W. L. B. Jenney.
Feb. 11	Sketching from Antique.	
" 25	Modern Buildings	R. Wood.
Mch. 11	Sketch Clubs	W. B. Mundie.
" 25	Cuba by Lantern	E. J. Wagner.
April 8	Sketching from Antique.	
" 22	Architectural Publications.....	Henry L. Gay.
May 6	Wood Carving	T. O. Fraenkel.
" 20	Architectural Aspirations.....	George Beaumont.
June 3	Sketching from Antique.	
" 17	Character Sketches	Charles Whitteley.
July 1	Architectural Students	R. A. Dennell.
" 15	Colonial Architecture	A. W. Hompe.
" 29	Sketching from Antique.	
Aug. 12	Style of Francis I.....	F. Parmentier.
" 26	Artistic Metal Work	H. C. Trost.
Sept. 9	Rambles Through New Orleans	A. Heun.
" 23	Sketching from Antique.	
Oct. 7	The Artistic Use of the Imagination	L. H. Sullivan.
" 21	Announcement of Prize Winners.	
Nov. 4	Annual Business Meeting.	
" 18	Annual Banquet and Exhibit.	

The D. G. Phimister gold medal for competition among sketch clubs to be later announced.

THE SUBJECTS FOR MONTHLY COMPETITION.

DATE.	SUBJECT.
1888	
Dec. 31	Stone Fireplace, for Hall (8 feet wide).
1889	
Jan. 14	Wrought Iron Gate, for a Residence (6 feet wide), with Stone Posts, one-inch scale.
Feb. 11	Country House (30 feet by 50 feet), Colonial style, one-eighth inch scale.
Mch. 11	A Bookcase (4 feet wide), for a draftsman, one-inch scale.
April 8	Plaster Frieze (18 inches high), full size.
May 6	Terra-cotta Vase (4 feet high, on pedestal), for a park, three-fourth inch scale.
June 3	Design for 25-foot City Residence, three stories high, French Chateau style, one-fourth inch scale.
July 1	Hall seat, one-inch scale.
" 29	Carved Wood Panel (12 by 16 inches), Indian style, full size.
Aug. 26	House Doorway, one-half inch scale.
Sept. 23	Pen and Ink Rendering from photo. Subject will be mailed to members.
Oct. 21	Design for Menu Card for C. A. S. C., 7 by 10 inches, pen and ink rendering.

In the above competitions the style of finish and number of drawings are left to the discretion of the designer.

The junior members will be required to design the same subjects, but their drawings will be kept in the junior class, and adjudged as such.

ROBERT CLARK GOLD AND SILVER MEDALS.

CHICAGO, December 14, 1888.

Resolved, That the donation of Mr. Robert Clark will best serve the interests of the architectural profession if its income be applied for the award of a medal or medals, to be annually awarded to the victor or victors in an architectural competition by draftsmen (not practicing architects, and under thirty years of age), these competitions to be instituted under the auspices of the Chicago Architectural Sketch Club. In case of the disbandment of the C. A. S. C., the fund to revert for the same purpose to the Western Association of Architects, or to such architectural association with which it may become merged, unless the trustees, when appointed, shall deem it wise at any time to transfer the said income over, for the same purpose as above mentioned, to a school devoted to architectural education which may be hereafter established in Cook county, in which case at the option of the said trustees, they may cease to apply said income to the sketch club competitions, and instead thereof, use it for providing medals for competitions of a similar character in the school proposed, and under rules found by its faculty; it being understood that the medals presented at these annual competitions shall be known as the "Robert Clark Testimonial." It is decided (by this committee appointed to suggest the disposition of the fund contributed by Mr. Clark), that he shall appoint his own trustees to carry out the resolutions as above provided.

It is the sense of this committee, and we believe will be the unanimous voice of the architectural profession, when informed of this testimonial, that Mr. Robert Clark has, in his voluntary offering, created a precedent which we hope and believe will extend to a reality, the possibilities of which are outlined in this resolution, namely, a school of architecture established in Cook county.

And we hereby tender to him the warmest expression of our appreciation of his kindness.

WILLIAM W. BOYINGTON,
DANKMAR ADLER,
W. L. B. JENNEY,
DANIEL H. BURNHAM,
HENRY LORD GARY.

The Robert Clark and D. G. Phimister prize competitions will be arranged at a later date.

Personals.

WILLIAM A. OTIS has opened an architectural office in the Commercial Bank building, the partnership of the firm of Jenney & Otis having been dissolved. Mr. Otis is well known to the profession in Chicago, and his abilities as a designer, both in exterior and interior work, will be recognized and appreciated by the public.

ARCHITECT JAMES W. McLAUGHLIN, of Cincinnati, the architect of the Art Museum, has been exceptionally honored by the presentation to the director of the Art Museum of a bust of Mr. McLaughlin, executed by Herbert Barbee, the sculptor. The bust is the contribution of over one hundred citizens, among them being many fellow architects. The bust has been placed in the sculpture gallery of the museum for permanent preservation.

Mosaics.

THE following letter explains itself:

St. PAUL, Minn., December 10, 1888.

The Pioneer Fireproofing Company, Chicago, Ills.:

Dear Sirs,—In your advertisement, noticed in "Convention Souvenir" of THE INLAND ARCHITECT, you have the "Aberdeen Apartment House" noted with A. Munster, C. E., architect. Inasmuch as we are the architects for this building, and Mr. Munster assistant for the iron construction only, we trust you will make correction at once. Very truly yours, WILLCOX & JOHNSTON.

THE popularity of the Babcock & Wilcox boilers may be gleaned from the number of orders (forty-nine) received during the months of October and November, aggregating 9,442-horse power, and from the widely scattered clientage, covering nearly all the civilized world, namely, Australia, Belgium, Brazil, Cuba, England, France, Germany, Russia, Sweden, Mexico, of foreign countries; and of domestic localities, New York City, Brooklyn, Philadelphia, Pittsburgh, Paterson, N. J., Schenectady, N. Y., Jersey City, St. Louis, Kansas City, Chicago and elsewhere. The last order from Russia was the twentieth, and from other foreign countries ranging from the fourth to the eighth.

THE Catholic church has in all times been a liberal patron of artistic work in the decoration of its cathedrals and churches; many a reredos and altar piece are monuments of the art of the carver or iron worker of the thirteenth and fourteenth centuries, and stand unequaled to the present day. But of late years the science of iron working has made rapid progress, and no better illustration can be offered than the work just completed by Messrs. Winslow Bros., of Chicago, for the Catholic cathedral of New Orleans. It is an electro-deposited copper-bronze altar, plated in silver, and for perfection of execution is a credit to Chicago and the firm who executed the work. The design is chaste and novel and was designed by Architect J. A. Fierch.

THE Pope Manufacturing Company, of Boston, thus apostrophises its goods and introduces a memorandum calendar:

The Old Year turns upon his heel,
And with a low thermometer
The icy New Year plays;
The wheelman, indoors, turns his wheel,
To run up his cyclometer
Because of snowy ways.
Meanwhile the editor may feel,
In using this anemometer,
He's shortening the days.

The typewriters manufactured by this company will soon be as well known to architects as their Columbia bicycles and tricycles are to their draftsmen.

A VERY handsome catalogue and price list has just been issued by Henry Huber & Co., manufacturers of plumbers' supplies, with headquarters at New York, Boston and Chicago. It is rarely a better specimen of either presswork, engraving, binding, paper, or compilation of a manufacturer's wares is seen. Certainly, this one is gotten up in a style suggestive of a holiday souvenir, and will find a prominent place on architects and plumbers office tables. It contains 222 pages, illustrated with 264 artistically gotten up representations of the firm's specialties, twelve of them in multi-crome; all of them to be seen in practical operation at either of the above-named headquarters. No doubt those who have already received a copy appreciate its usefulness, and those who have not so been favored, can be so by addressing either the New York, Boston or Chicago depots.

THE L. Wolff Manufacturing Company, of Chicago, have just received from the binders their catalogue and price list for 1889. The enterprise of this company is well indicated in the style of this book, which is one of the most complete and expensive works of the kind that has ever been issued from the press. The book is in octavo form and comprises 463 pages, bound in maroon morocco covers. Preceding the title page are three engravings of the company's plant, and the 463 pages are illustrated by 888 engravings of the various articles of plumbers' and sanitary specialties—from the plainest, or least expensive, to those of the most elaborate finish and highest cost—that are the output of this mammoth establishment. The engravings of "supplies" have been got up, evidently, without regard to trouble or expense, and are all made, showing a sectional view of the working and construction of each article, thus dispensing with extra side cuts and sections to explain the working of the several fixtures. Again, the price of each article is placed under each engraving, and thus is done away with the necessity of an extra or supplementary price list, and the same are absolutely authoritative, having been brought to date in every case. A complete alphabetical index, enumerating 589 different specific articles in plumbers' supplies, precedes the subject matter of the book. A peculiarity of the catalogue is a series of finger-tabs, similar to those used with heavy ledgers and books of record, on which are printed the names of classified specialties, as "Fuller work," "self-closing," "soil-pipe," "sinks," "bathtubs," "lavatories," "laundry tubs," "water closets"; a device gotten up with special reference to the convenience of architects to enable them to open the book, without hesitation, at any of the given named goods; in fact, no pains have been spared to make this a standard reference book not only for architects, but plumbers; in short, everyone who has occasion to use a catalogue of plumbing goods. It is well to mention that a feature of the Wolff Manufacturing Company's goods is, that in the lavatory, bath and laundry tub, and basin supplies—all of which are made attractive in appearance—special reference is had in their construction to having all the fixtures exposed, in order that they may be readily reached without having to tear down walls and partitions, should it at any time become necessary to make repairs. Many of these features are peculiar to the company, having been secured by letters patent; and all are of incalculable value to householders and house designers. However, all this, and more, is appropriately set forth in this handsome book, that ought to be in the possession of every architect, and which may be had on application to the company, at the general office, Nos. 93-111 West Lake street, or to its exhibit department, No. 79 Dearborn street, Chicago.

Railroad Notes.

MR. L. M. WALTERS, the veteran California excursion manager, is creating quite a revolution in California travel. Mr. Walters guarantees to save those who patronize his excursions between \$25 and \$35. The Chicago & Alton and Union Pacific railroads have recently built and placed at Mr. Walters' disposal a number of new and very handsome tourist sleepers. These are modeled after the style of the regular Pullman sleeping car, and are built by that company. There is no upholstering in the cars, which is the only difference between the Pullman sleeping car and the Tourist sleeping car. Mr. Walters has overcome this by furnishing the cars with new carpets, cushions for the seats in the daytime, mattresses, pillows, sheets, blankets and curtains for the berths at night. Each car is provided with separate and commodious toilet rooms for ladies and gentlemen, in which will be found towels, soap, and all the necessities of a toilet room. A colored porter is in charge of each car. His sole duty is to cater to the wants of passengers, and a courteous excursion conductor accompanies each party through to the coast. Only second-class tickets are honored in these cars. Passengers are charged \$3 for lower berth and \$2.50 for upper berth, from Chicago to Los Angeles and San Francisco. Where two persons occupy a berth together, an additional charge of \$1 is made for the second person. Considering that passengers have all the advantages and comforts of a first-class sleeping car, these charges are very moderate, and save the passenger everything claimed by Mr. Walters. These excursion parties leave Chicago every second week, via the Chicago & Alton railroad. For further particulars, apply to any ticket agent Chicago & Alton railroad, or to L. M. Walters, general excursion manager, Sherman House, Chicago.

Business Outlook.

OFFICE OF THE INLAND ARCHITECT, }
CHICAGO, January 5, 1889. }

There are very few surface indications of weakness in the commercial, manufacturing or building situations. The profitable investments of capital during the past year have been very large, and have done very much to strengthen confidence and to induce investors in all directions to proceed actively during 1889. The cost of nearly all kinds of material is low, and fluctuations are not likely to occur. Trade organizations have more control over production than they have ever had before, and no general break in prices is anticipated. Notwithstanding all the discouragements that have frequently beset us, caused by unexpected fluctuations or breaks in values, there is less occasion than there has been for years that any serious disasters will overtake the industries. Manufacturers in all parts of the country have more business in hand than usual, and there is a vast amount of work that can be relied upon, such as railroad building, the supply of all manner of railway equipments, the construction of a very large amount of machinery for mills, shops, factories and mines and an unusual amount of building work, much of which will be done in new localities and small towns throughout the Northwest, West and South. In fact, without exaggerating possibilities or misinterpreting indications, it is safe to say that in nearly all avenues more work will be done, more money expended, better profits will be realized and more money expended during the next twelve months than during the past twelve. A large amount of house building is demanded. The requirements in this direction are increasing. Industries are scattering out into new places. More iron and steel works and blast furnaces are being built, little towns are multiplying, and although railroad building itself seems to be checked for the present, there are openings for capital and enterprise in other directions which will fully compensate for any decline in this direction. There is an abundance of money in banking centers. The rate of interest is low, and there are inducements for men of enterprise to enter into new industrial and manufacturing and commercial enterprises with the fullest confidence in profitable returns.

Synopsis of Building News.

Chicago, Ill.—The month has been quiet in the architects offices, but the feeling is general that next season will be a busy one. This is not only true in regard to general city building and the construction of residences in the suburbs, but there are well-grounded rumors of some exceedingly large work, larger in fact than that of any preceding year.

Strikes in the building trades in 1886 and 1887, undoubtedly were most largely responsible for the comparatively small number of large building constructed during the past year, and although there has been but little agitation recently in labor, still past experience makes a stoppage of work next spring a possibility, though not probable. Wages are generally higher than the demand for labor warrants, and they will certainly not be decreased as the building season approaches, so that no cause for strikes will exist, and if they come will be purely the result as heretofore, of agitation by unauthorized and vagrant agitators. It is hoped that this will be avoided, however, and that the severe lesson of the past two years which has shown the utter foolishness of every strike which has been inaugurated in any branch of labor, will have its restraining effect.

The construction of the year 1888, comprised 4,958 buildings, 739 basements and 1,913 sheds, at an aggregate cost of \$20,552,700. The total feet frontage of the buildings erected, amounted to 116,419 feet—nearly 23 miles.

Architect George Beaumont: For B. F. McConnell, six two-story attic and basement houses, pressed brick with Lamont stone trimmings, furnace heat and modern conveniences; cost \$20,000. For A. H. Lowder, two two-story attic and basement houses, hot water heat, and all modern conveniences; cost \$16,000; under way. Plans for Edward Adcock, three-story residence, 26 by 80 feet, gray granite; a feature of the front will be a large bay window and high gable; interior finished in different hardwoods; cost about \$20,000. For J. Myers & Son, three-story store and flat building, 60 by 70 feet, pressed brick with stone trimmings; cost about \$10,000.

Architect W. A. Furber: For Schonbeck & Henderson, five-story and basement warehouse and factory, 66 by 140 feet; cost \$50,000.

Architect J. Speyer: For Mr. Esemann, block of stores and flats, 25 by 70 feet, pressed brick with brownstone trimmings; cost \$14,000.

Architect C. A. Weary: For H. W. Martin, seven three-story and basement flats, 46 by 100 feet; cost \$25,000.

Architect W. T. Leshner: For Morris & Stern, five-story and basement warehouse, 46 by 99 feet, pressed brick with stone trimmings, elevators, etc.; cost \$28,000.

Architect John H. Wagner: For Charles Mair, three-story store and flat building, 25 by 76 feet, pressed brick; cost \$14,000.

Architect John J. Houlin: Six-story and basement apartment house, containing thirty-two flats, 50 by 100 feet, pressed brick with brownstone trimmings, hardwood finish and modern improvements, including passenger elevators, steam heat and electric lights; cost \$75,000. For Henry Cohn, four three-story flat buildings, 72 by 88 feet, first story raindrop brownstone, upper stories pressed brick, interior finish hardwood; hot water heat, and all modern conveniences; cost \$50,000; already under way. For A. Schonberg, two three-story flats, 25 by 70 feet; cost \$24,000.

Architects Wilson, Marble & Co.: For A. P. Smith, three-story residence, 30 by 72 feet, St. Lawrence marble, hardwood finish, steam heat and modern conveniences;

cost \$15,000. Four three-story dwellings, brown and Bedford stone fronts, slate roofs, interior finish, oak cherry and sycamore; furnace, steam, and combination hot water and steam heat; all modern conveniences; cost \$40,000. For A. Mendel, two three-story dwellings, 50 by 72 feet, Bedford stone fronts, slate roofs, hardwood finish, steam heat, etc.; cost \$25,000.

Architects Edbrooke & Burnham: For James Gibson, two three-story and basement dwellings, 37 by 46 feet, pressed brick with Bedford stone trimmings, modern conveniences, furnace heat; cost \$12,000.

Architect W. H. Drake: For E. G. Mason, two-story flat building, 125 by 100 feet; cost \$12,000.

Architect Otto Strack: For William Kent, four-story factory building, 60 by 100 feet; cost \$20,000.

Architect D. A. La Point: For A. Dumont, three-story flat building, 22 by 70 feet, pressed brick with stone trimmings; cost \$7,000.

Architect Robert Rae: Y. M. C. A. building for employes, Pittsburgh, Fort Wayne & Chicago R. R. Co.; cost \$10,000; work begun.

Architect J. B. Hunter: For Mrs. Lizzie S. Hunter, three-story flat building, 23 by 60 feet; cost \$5,000.

Architect Julius Huber: For Hemstead Washburne, three-story residence, 45 by 70 feet; cost \$25,000.

Architect M. L. Beers: For J. Edwards, three-story residence, 40 by 60 feet; cost \$15,000.

Architect W. W. Boyington: For I. T. Hall, two-story flat building, 25 by 47 feet; cost \$5,000.

Architect George W. Maher: For D. G. Newkirk, two-story residence; cost \$4,500. For A. Lund, two two-story dwellings, 50 by 60 feet; cost \$9,000. For S. N. Hurd, two-story residence, 38 by 70 feet; cost \$8,000.

Architect John Krivanck: For Gustave Gavel, block of three-story stores and flats, 25 by 54 feet; cost \$6,000.

Architects Flanders & Zimmerman: For William Crilly, flat and hall building; cost \$20,000.

Architect Oscar Cobb: For E. H. Bucklin, six-story building, 83 by 50 feet, pressed brick and brownstone; passenger elevators, steam heat, etc.; cost \$25,000. Preparing plans for improvement to Opera House, Evansville, Ind.; cost about \$25,000.

Architect T. N. Bell: For James Woodley, two-story dwelling, Michigan sandstone; cost \$4,500; work begun.

Architect J. A. Bongard: For P. Thompson, dwelling; cost \$4,000. For R. S. Skelly, dwelling; cost \$3,000.

Architect C. J. Warren: For Leander McCormick, nine-story fireproof apartment house, 100 by 150 feet, first story brownstone, remaining stories pressed brick and terra-cotta. There will be two courts, each 16 feet wide, and so arranged that there will be six flats on each floor, divided into parlor, library, dining room, chambers, a kitchen, butler's pantry, storage room, etc. There will be commodious entrances, meeting in the center at two passenger elevators. The halls and corridors will be of tile and marble. There will be but little woodwork. In the basement, a billiard room sufficiently large for the accommodation of eight tables. There will also be a bowling alley, a barber shop, an office with telephone and switchboard connecting this line with every apartment in the house. A refrigerating room will also be located in the basement. The house will be heated by steam from three boilers in the basement room. The building will be lighted throughout by incandescent light. On the first floor will be a large public dining room and kitchen. The interior woodwork in the dining room will be in mahogany. The estimated cost is \$250,000.

Architect A. M. F. Colton: For Mrs. Mathews, two-story attic and basement residence; cost \$10,000. For Mrs. H. Skidmore, two dwellings, brown pressed brick, hardwood finish, steam heat, etc.; cost \$10,000. Block of stores; cost \$25,000. Store and apartment building; cost \$25,000.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall:

Nothing has occurred within the last month to cause a change in the feeling that next season will be a busy one.

According to Mr. James Glenn, the addition to our new City Hall will be just one-half the size of the structure now under way. Mr. Hannaford, the architect, estimates its cost at \$350,000.

It will be exactly like the Plum street front in size, shape, design and finish, with the exception of the tower. The basement will be occupied with cells for male prisoners. On the first floor will be the police court-room, private offices of judge and prosecutor, offices of chief and inspector of police, chief of detectives, police court clerk and police department clerks and other offices.

The second floor will be devoted to the reading room and library of the police, gymnasium, offices of the police commissioners and their clerks. The third floor will consist of a police drill room and place of detention for women and children, as well as apartments for the matron. There will also be a cooking department for prisoners on this floor, and sufficient arrangements to hold the entire police force under arms for a week, in cases of emergency. The addition will be very complete, and the police department will have quarters as fine and convenient as any in the country.

Our Chamber of Commerce is about finished, and will be dedicated January 24, 1889, with appropriate ceremonies, "music by the band," etc.

Lucien F. Plympton reports: Alterations to stone front store of S. Kuhn & Sons, adding two stories, etc.; cost \$8,000. For Geo. P. Bassett, Esq., a two-story half timber cottage of seven rooms; cost \$2,500. Also a remodeling of the piano store of M. Steinert's Sons, amounting to \$5,000.

The foundations for a warehouse for Evans, Lippincott & Cunningham are finished; size of building to be 100 by 150 feet, six stories high; cost \$65,000.

The Third National Bank is entirely completed, and is greatly admired by all.

G. & A. Brink have drawn plans for a large malt house for Herman Lackman, to be four stories high, size 90 by 100 feet, and to be very complete.

Also a tenement house for Joseph Gerling.

Henry E. Siter has his hands full. His latest extensive plan is that of the Mt. Auburn Presbyterian church, to be built of stone in that beautiful style of architecture known as English Gothic. The kind of stone will be either brown Lake Superior sandstone or freestone, with brownstone trimmings, while the roof will be either tile or red slate. Its seating capacity is as follows: Audience room, 600; Sunday-school room, 500; infant

class, 300. The interior finish will be oak, and the ladies' parlor and pastor's study will be very complete. It will be heated either by steam or hot water; cost \$45,000. He has prepared drawings for an addition of four rooms to the Fourth Intermediate School to cost \$10,000; also drawings for an eight-room addition to the Nineteenth District to cost \$20,000. In both instances the Smead system of heating will be adopted.

S. Hannaford & Sons have their hands full with the plans named below:

For Arthur Stephenson, a two and one-half story brick residence of twelve rooms, with slate roof and hardwood finish.

For Mr. Reed Case, three double houses of sixteen rooms each, to be built of frame, with slate roof and pine finish.

For Miss Mollie Williams, three frame houses of eight rooms each, with pine finish and slate roof.

Also a four-room addition of brick, two stories high, with slate roof, to the Wyoming schoolhouse.

This firm is also busy on sketches.

Messrs. Crapsey & Brown have their time well employed, and have prepared plans for two quite picturesque flat and store buildings for W. W. Smith and A. L. Schockley, respectively.

Detroit, Mich.—Architect P. Dederick, Jr.: For Franciscon Sisters, Omaha, Neb., three-story brick hospital; cost \$125,000.

Duluth, Minn.—The following are contemplated structures to be commenced the ensuing season: Chamber of Commerce; cost \$180,000. Minnesota Loan and Trust Company building; cost \$40,000. Masonic Temple; cost \$150,000. Public School building; cost \$40,000. Church of Sacred Heart, cathedral building; cost \$100,000.

Hamburg, Ark.—Mrs. M. J. Files has the materials on hand for the construction of a hotel building.

Indianapolis, Ind.—During the year just closed there were 1,205 building permits issued, at an estimated cost of \$1,400,000. A great many were for improvements to residence property, although forty-five business blocks were put up. There has been a large amount of building in the suburbs, of which no official record has been kept.

Kansas City, Mo.—The result of the season in Kansas City, as compiled, is an expenditure in building of \$3,272,000, represented by 2,300 residences, 128 business houses, 4 churches, 3 schoolhouses and 8 factories.

S. R. Fink is erecting two brick residences, to cost \$15,000. Dobson & Douglas, three-story brick business block, to cost \$20,000. S. W. Bush, brick block, to cost \$16,000. E. A. Hornbrook, three-story brick business house, to cost \$10,000. Dr. J. T. Craig, block of five three-story brick business houses, to cost \$20,000. Mary L. Simpson, two double brick tenements, to cost \$10,000.

Little Rock, Ark.—Architects Bartlett & Thompson are preparing plans for a fireproof clerk's office, to be built at Warren, Ark.; cost about \$5,000. Also plans for a jail, to be built at Lonoke, Ark.; cost about \$15,000.

Malvern, Ark.—Williams and Taylor are rebuilding their wagon shops which were burned recently.

Minneapolis, Minn.—The annexed exhibit shows the number of permits taken out during 1888, with estimated cost and character of construction: 1,411 frame dwellings, \$3,047,850; 53 frame stores and dwellings, \$105,200; 77 frame workshops, \$87,750; 15 brick stores and dwellings, \$52,000; 16 brick workshops, \$89,500; 66 brick stores and offices, \$2,760,390; 55 brick dwellings, \$1,065,050; 732 frame and brick barns, \$204,325; 11 frame and brick churches, \$165,700; 7 frame and brick schools, \$252,400; 1 brick hospital building, \$48,000; 183 stone foundations, \$75,450; 1,118 additions and alterations, \$861,155; 11 miscellaneous, \$103,281; 3,736 permits, aggregating \$8,763,141.

Architects C. T. Mix & Co. are preparing plans for a twelve-story building, brick, granite, stone and iron—fireproof roof; cost \$1,250,000.

Mineral Springs, Ark.—Wheeler Bros. have organized a stock company to erect a tannery building, to be ready for occupancy February 1.

Sioux City, Iowa.—The building prospects for the next season are very promising.

Architect E. W. Loft reports taking bids for a seven-story office building, to be let January 21. The foundations are already in. Also plans for a number of private residences.

Toledo, Ohio.—The building season of 1888 has been a fairly good one for Toledo, equal, perhaps, in the aggregate investment to that of 1887, though fewer heavy buildings have been erected and the store buildings being of an exceptionally minor character. The outlook for 1889 is as promising as was that for 1888 one year ago, but there is no reason to anticipate an immediate "boom." The growth of Toledo is steady and healthy, and generous enough to inspire all with full confidence in its early attainment of the proud position its most ardent admirers predict. There has in all the years past been a notable absence of strikes or labor troubles of any kind. Mechanics have evinced their conservatism and good sense in formulating rules and prices not obnoxious to the capitalists who build, and consequently the wheels of progress have never been clogged as in many other cities. Toledo may well congratulate herself on this score and be thankful for the good judgment of her skilled workmen; the large number of buildings which have been erected attesting to this era of peace and good understanding, which there is every reason to believe will continue in a long future.

The following covers the work of the season for the named architects: Architect N. B. Bacon, 38 buildings; aggregate cost \$320,500. Architect David L. Stine, 19 buildings; aggregate cost \$120,800. Architect L. G. Welker, 20 buildings; aggregate cost \$138,400. Architects E. O. Fallis & Co. The principal work of this firm consists of public buildings. In addition to plans for five residences at an aggregate cost of \$45,000, they have furnished plans for the Lucas County Children's Home; estimated cost from \$130,000 to \$140,000; Toledo Insane Asylum, additions; cost \$16,000; Toledo Public Library; cost \$55,000; Albion, Ind., Court House; cost \$100,000; Bryan, Ohio, Court House; cost \$125,000; Normal School building at Wauseon; cost \$20,000; Odd Fellows Temple at Sandusky; cost \$25,000; Hotel Victory at Put-in-Bay; cost \$150,000.

Toronto, Ont.—Architect K. Kelly, for the department of public works, plans for an insane asylum; cost about \$300,000.

The Jackson Heat-Saving and Ventilating Grate.

COMBINED GRATE AND FURNACE.

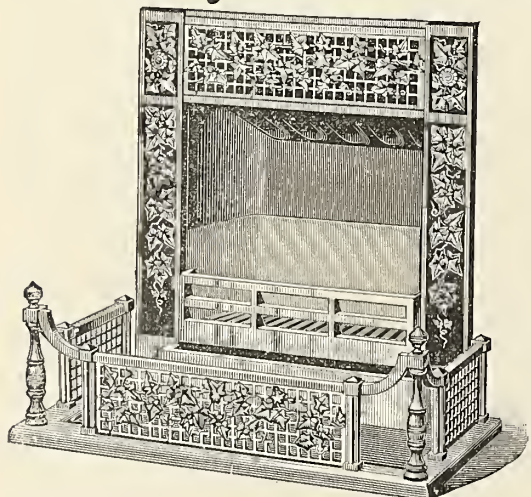
HEATING ON ONE OR TWO FLOORS.

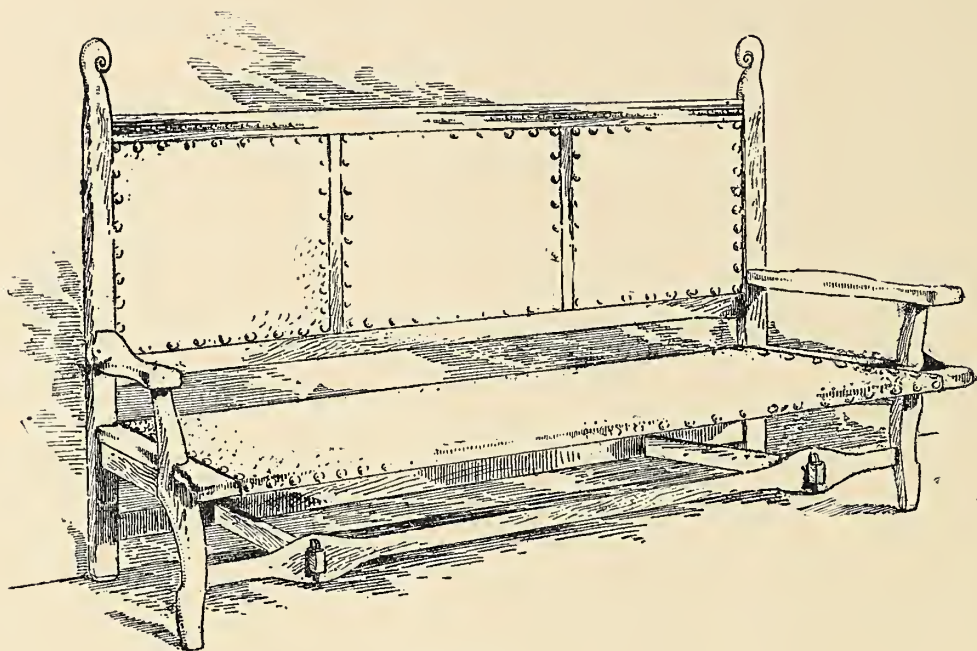
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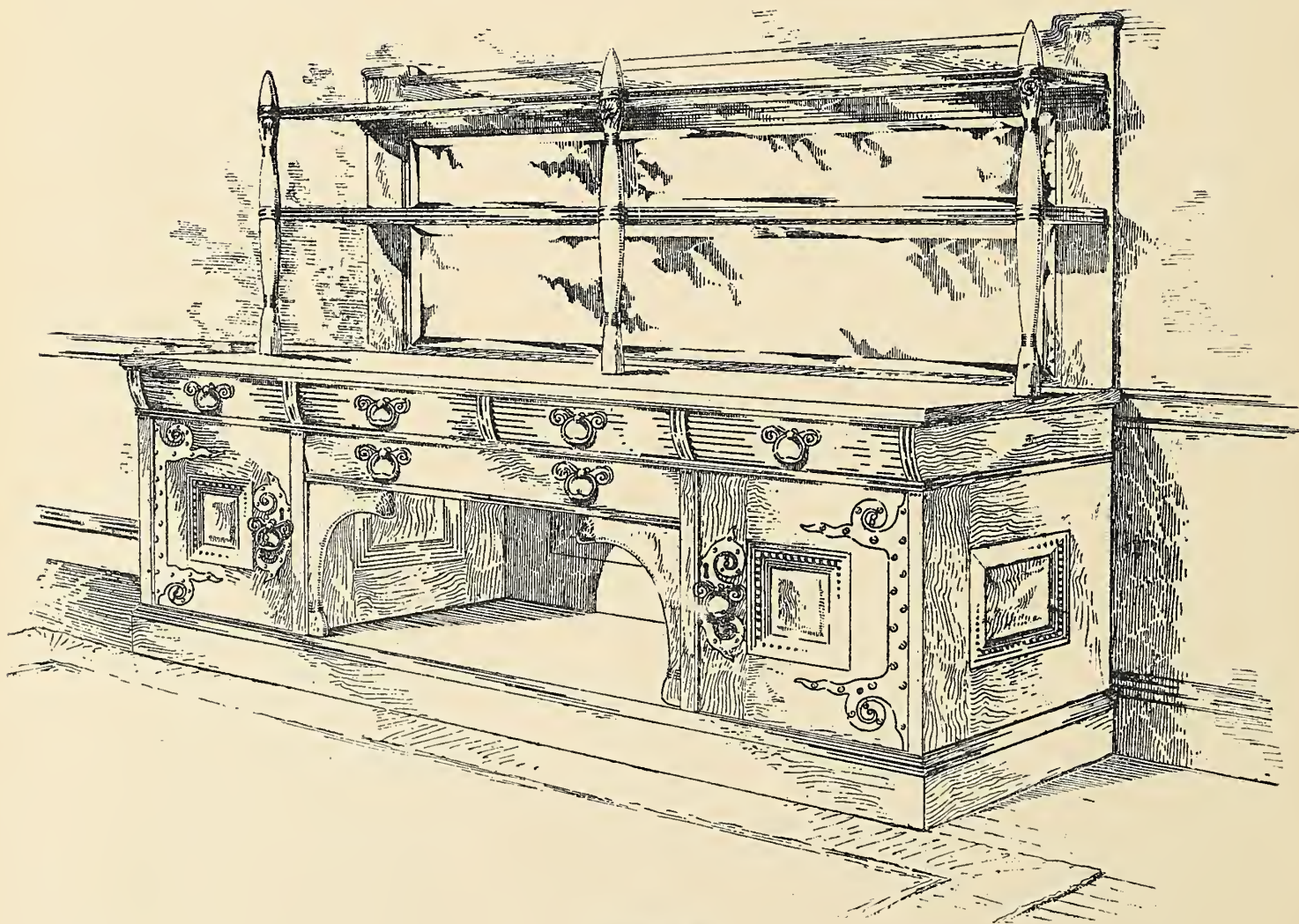
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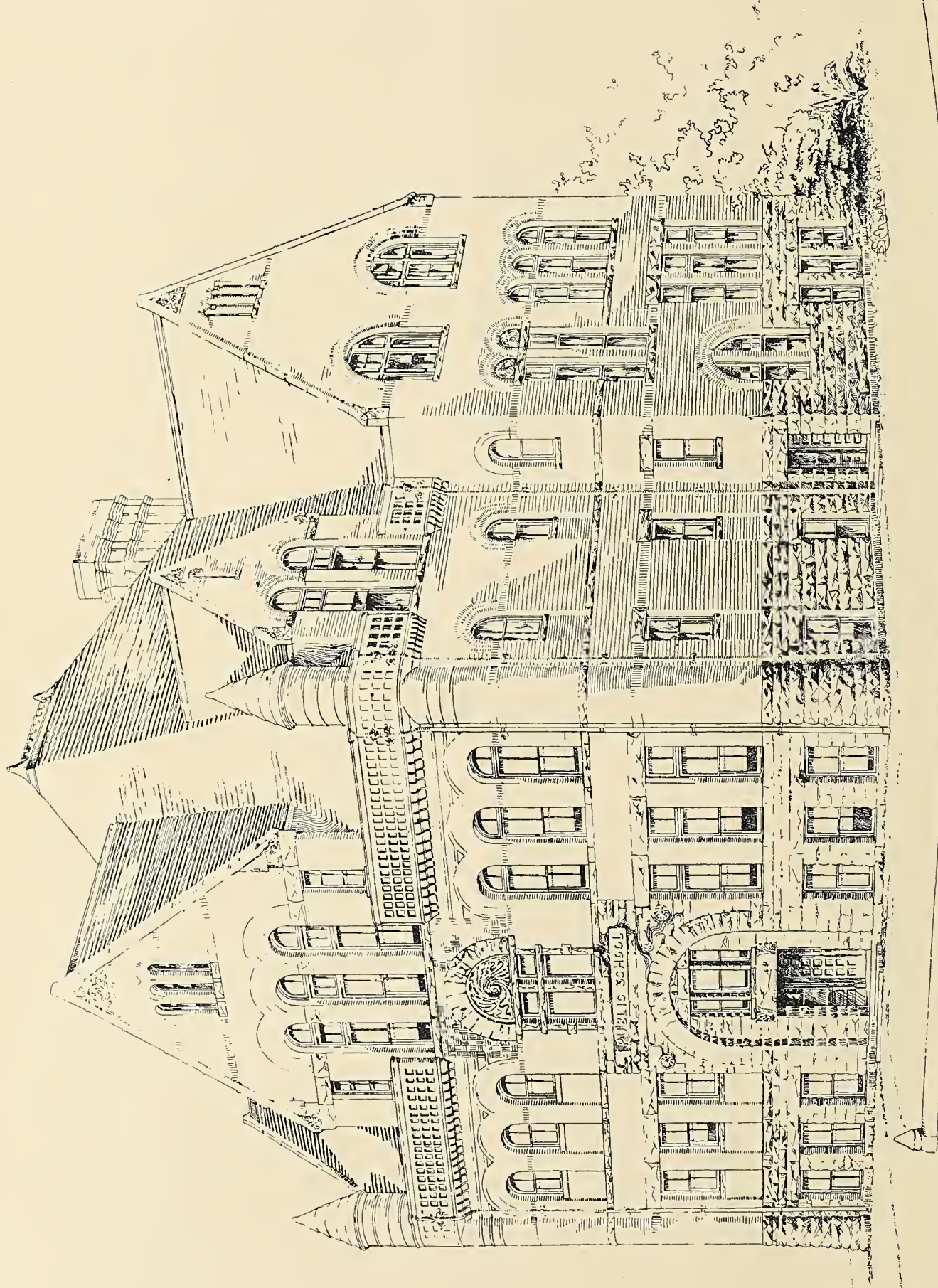
HALL.



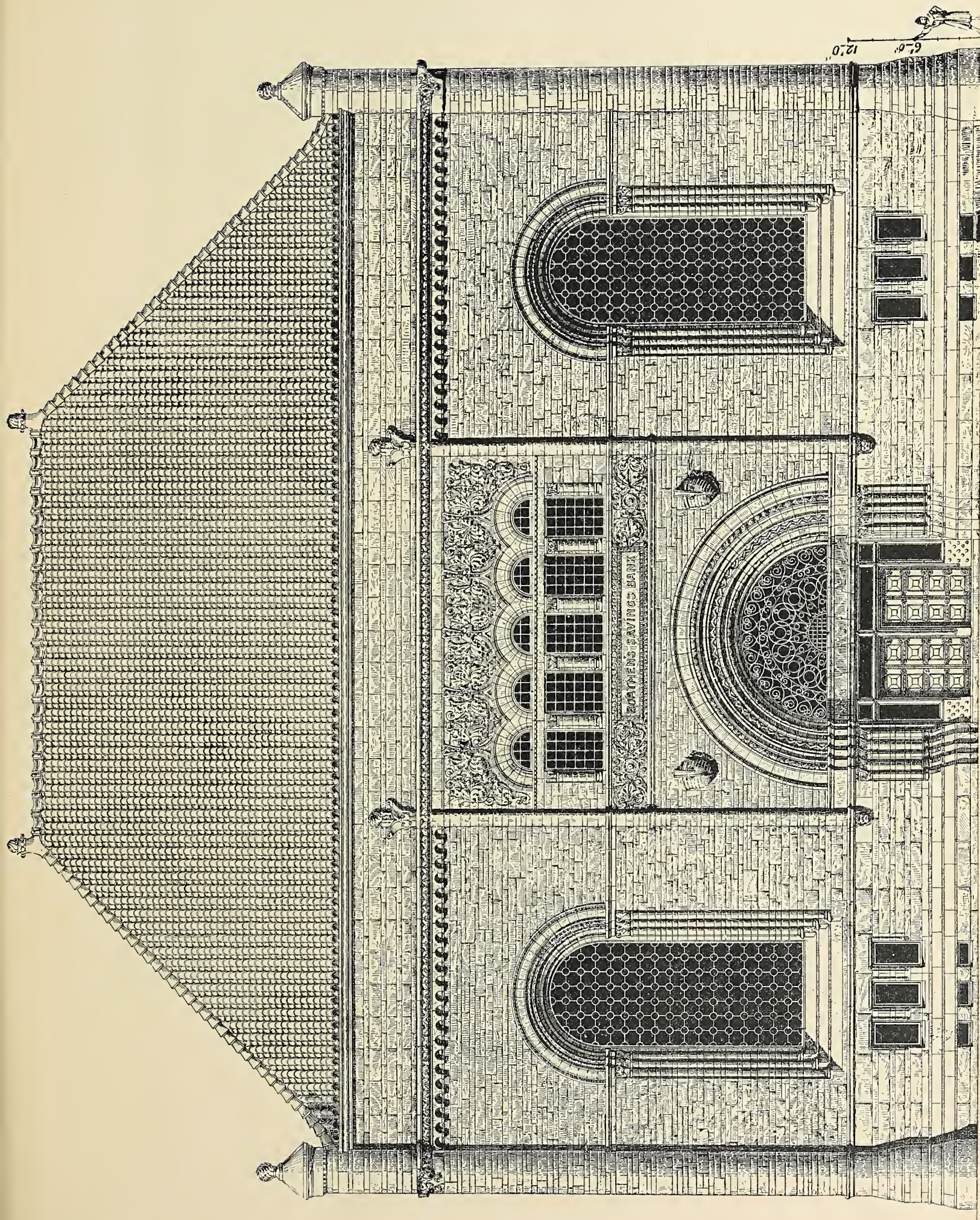
DINING ROOM.

FURNITURE FOR DENVER CLUB, DENVER, COL.

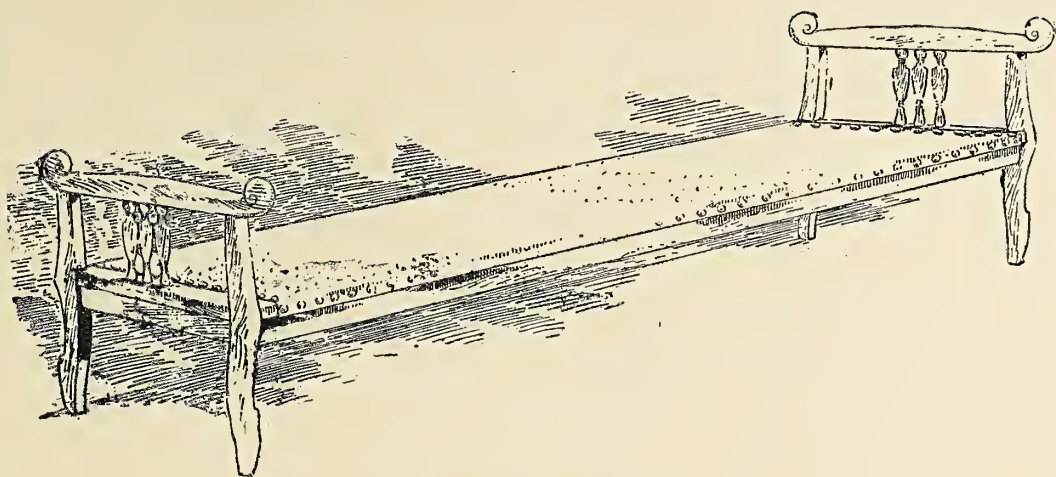
DESIGNED AND PRODUCED BY WM. MORGAN PETERS, CHICAGO.



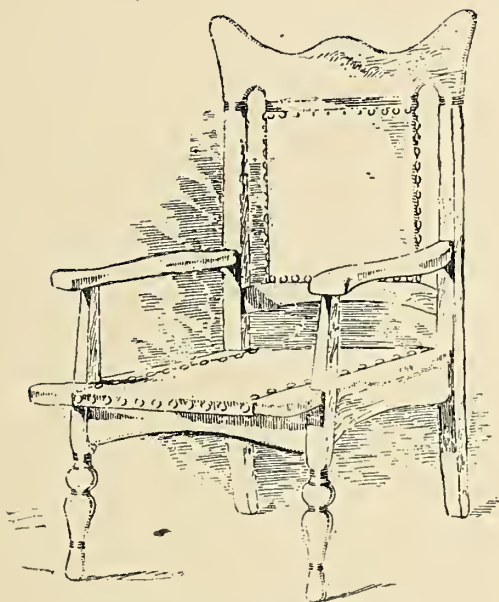
PUBLIC SCHOOL, MEMPHIS, TENN.
M. L. BEERS, ARCHITECT, CHICAGO.



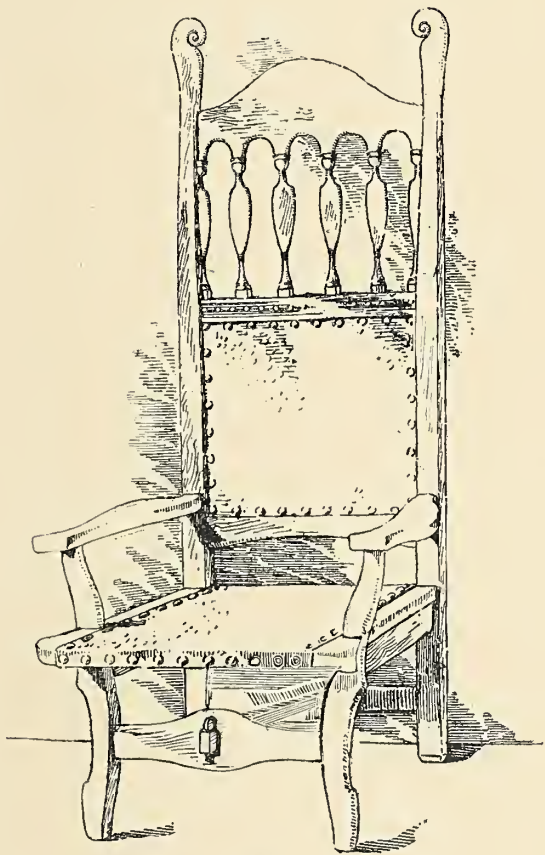
COMPETITIVE DESIGN FOR BOATMEN'S SAVINGS BANK BUILDING, ST. LOUIS, MO.
BURNHAM & ROOT, ARCHITECTS, CHICAGO.



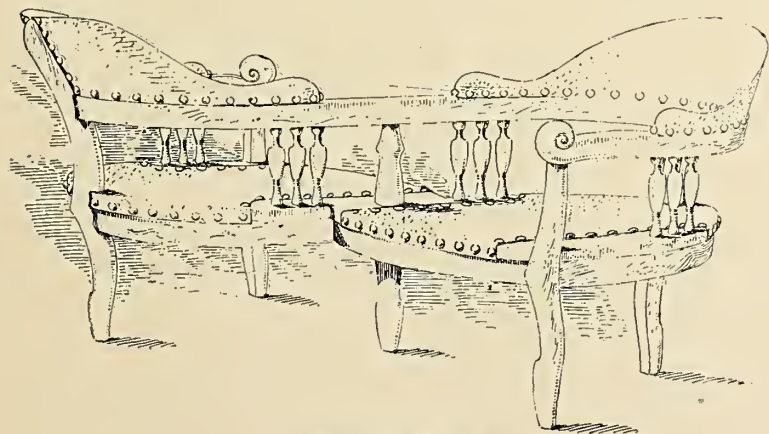
SERVANTS' BENCH.



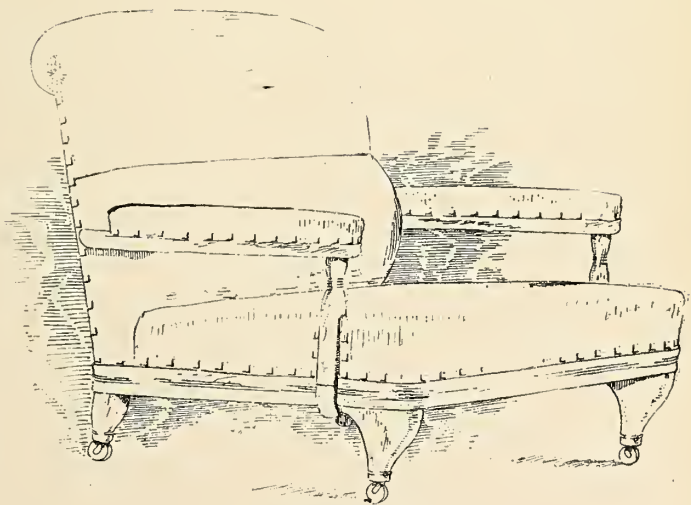
LOUNGING ROOM AND LIBRARY.



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CONVERSATION CHAIR.

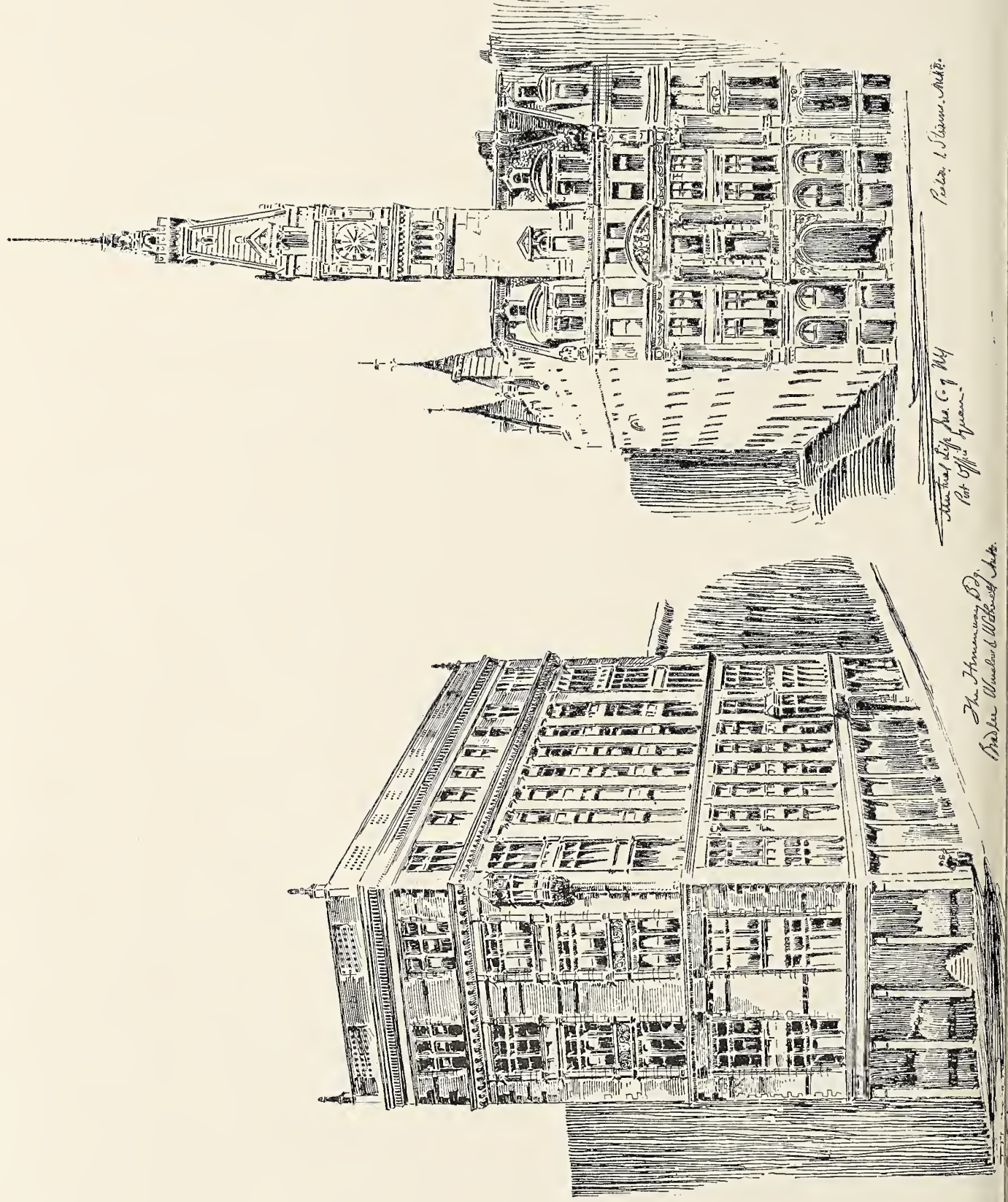


LOUNGING ROOM.

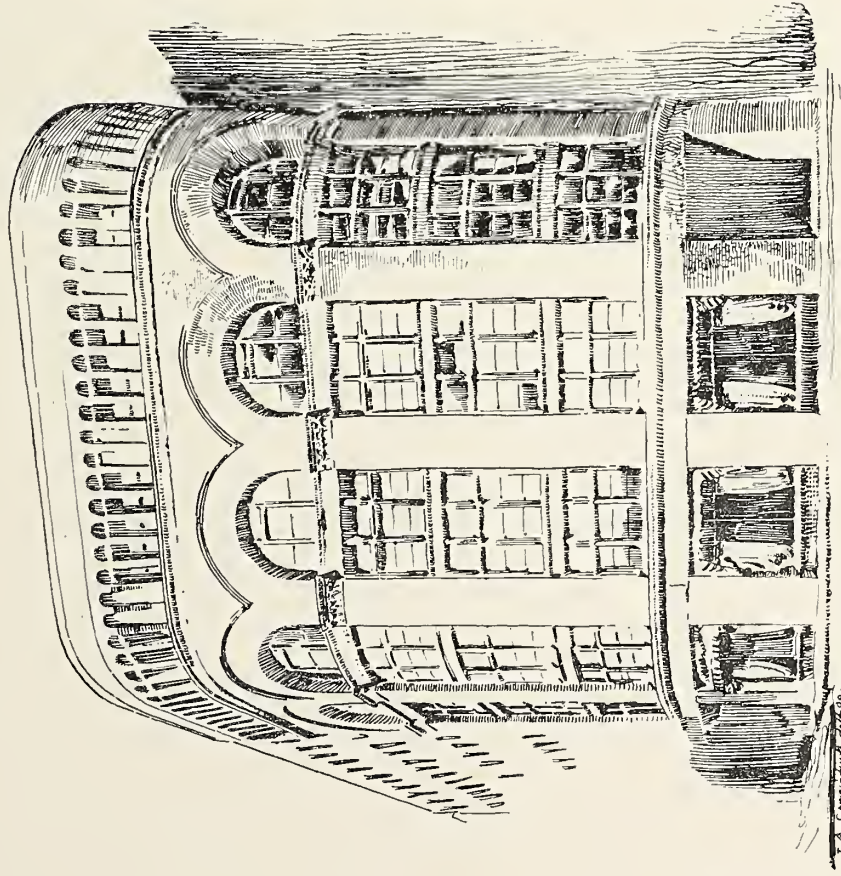
FURNITURE FOR DENVER CLUB, DENVER, COL.

DESIGNED AND PRODUCED BY WM. MORGAN PETERS, CHICAGO.



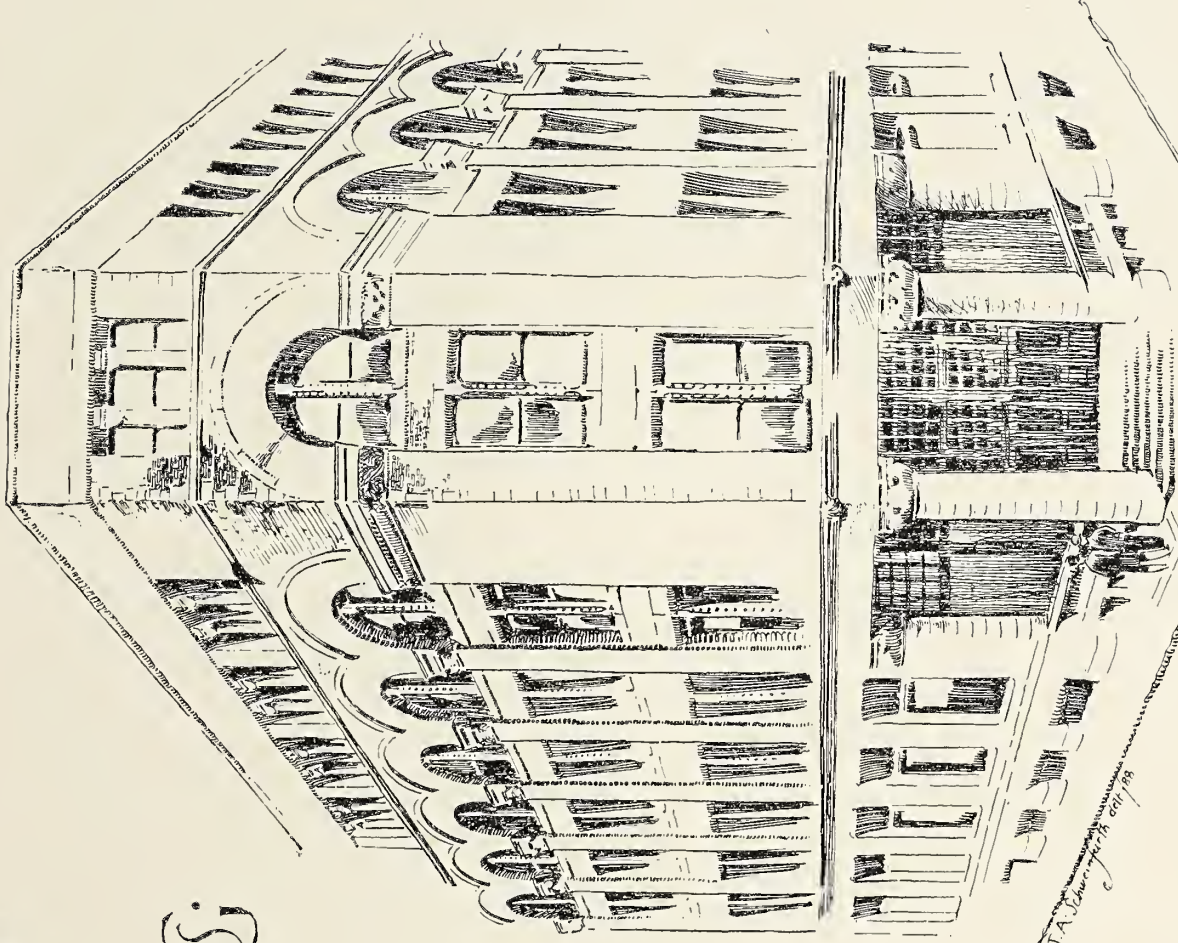


BOSTON SKETCHES No. IV. BUSINESS BUILDING



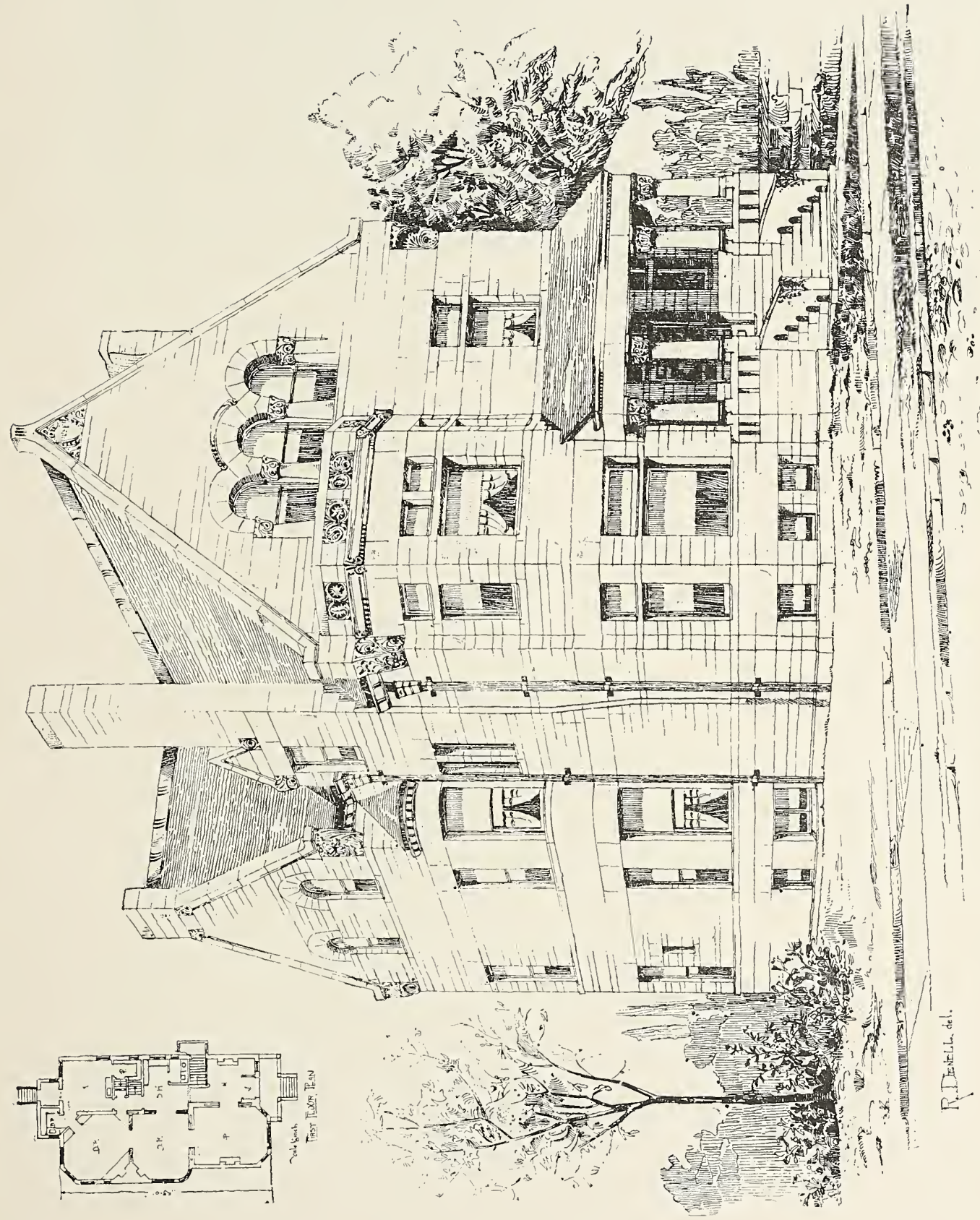
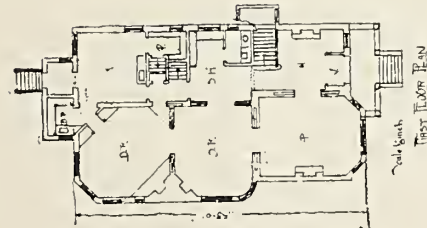
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N. H. Richardson (Arch't)



Sketch for R. H. White & Co. - Boston

Parson & Stearns (Arch'ts)



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W. W. CLAY, ARCHITECT.



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THIS intermediate number completes Vol. XII. Vol. XIII commences with the regular number for February.

A MEETING of the Board of Directors of the Western Association of Architects will be held at Chicago, on Tuesday, January 29, at which time applications for membership will be considered, and the report of the joint committee on consolidation will be acted upon. Members having any business they wish brought before this meeting will communicate with the secretary.

A MONG the associations that will hold their annual conventions within the coming month are the Illinois Society of Engineers and Surveyors, at Bloomington, January 23, 24 and 25; the Kansas State Association of Architects, at Topeka, January 29 (postponed meeting); the Western New York State Association of Architects, at Rochester, February 5 and 6; the Louisiana State Association of Architects, at New Orleans, February 6; the National Association of Builders, at Philadelphia, February 12, 13 and 14; the Architectural Association of Iowa (place of meeting not announced), February 13; and the Association of Tennessee Architects, at Memphis, February 21.

A committee, acting under instructions from the Kansas City (Mo.) Builders' and Traders' Exchange, is endeavoring to persuade the legislature of the State of Missouri to substitute the Illinois mechanics' lien law for the one now in force in that state. This law was amended and changed in all vital points affecting building by two acts of the legislature, the first approved May 31, 1887, and the second approved June 16, 1887, both going into effect July 1, 1887. These amendments were a total surprise to the contractors of the state, and the law in its new shape was immediately taken up and discussed by the Illinois State Association of Architects and the Chicago Builders' and Traders' Exchange. The general opinion was that it was a good law for the material-man, and would weed out a large number of irresponsible contractors, but all agreed

that its enforcement would, in case it proved inoperative, soonest procure its repeal. According to its provisions, architects had new forms of certificates and contracts printed, and to facilitate business the office clerk qualified as a notary public, as contractors were compelled to make out schedules of money paid and money owed, for what and to whom, to the truth of which he made affidavit before a certificate could be obtained from the architect. This affidavit, under the law, is more often false than true; as, for instance, when, on the tenth of the month, the contractor swears he owes nothing, he in fact owes for the material purchased since the first of the month. One point in which the law is an advantage is when the contractor in filing a lien was obliged formerly to look up the owner, mortgagees, if any, etc., he now simply files a duplicate bill in the circuit court and obtains a complete lien.

WE have taken considerable pains to ascertain the exact opinion of all classes subject to the law, after eighteen months' trial, by interviews with representative members of each. The sentiments expressed were remarkably uniform in effect. A representative architect voiced the general sentiment expressed by others in saying, "It has been enormously troublesome; it involves an enormous amount of unnecessary office work, and it has stamped out of existence large numbers of contractors whose capital was not large enough to carry on their work and pay for material and labor." It was found that architects evaded the law to favor these by issuing a certificate to the sub-contractor, which payment enabled the contractor to obtain further credit. Checks were often dated ahead for the same purpose, and cases were found where false affidavits were made by contractors who honestly wished to meet their obligations. Among the contractors the sentiment expressed was forcible: "The law is a nuisance to the contractor with capital, and an outrage upon those without." The material-man is not wholly satisfied, though the law makes him as secure as any law can. It is customary to investigate the standing of applicants for credit, and those who do this have little use for the law, but are subject to its inconvenience. One contractor held that it was class legislation in its worst form—a distinction between the poor and the rich. Another pointed out that a mechanics' lien law was originally intended to secure to the laborer the payment of wages alone, and its purposes had been perverted to cover many things it had no right to. We have printed the revised law in full, and also a discussion on the subject by the Chicago Builders' and Traders' Exchange, elsewhere in this issue.

Missouri State Association of Architects.

ON January 8 and 9, the annual convention of Missouri State Association of Architects was held at the Lindell Hotel, St. Louis.

The convention was called to order by President C. K. Ramsey who stated in effect that since the last annual meeting, five new members had been enrolled and thirty-one had been dropped from the roll, so that at this time there were fifty members in good standing, a good working force, but not as many as a few years ago.

The roll was called by Secretary Fassett, who then read the following report of the Executive Committee:

ST. LOUIS, December 8, 1889.

Mr. President and Gentlemen of the Missouri State Association of Architects:

Your Executive Committee beg leave to report as follows:

There have been four meetings held during the year. At the first meeting held at the Brunswick Hotel, Mr. Henry Van Brunt, of Kansas City, was elected a member of this Association. It was also voted that the dues of Messrs. Hackney and Pruden, who were elected to membership on the second day of the last convention, be applied to the year 1888.

At the second meeting, held October 12, 1888, the following names were dropped from the roll of membership for non-payment of dues:

B. F. Auferheide, St. Louis.	Chas. Marcotte, Kansas City.
R. A. Berger, St. Louis.	A. Monsheim, St. Louis.
V. W. Coddington, Kansas City.	Fred Nordman, St. Louis.
J. C. Edgar, St. Louis.	G. W. Osborne, Carthage.
W. E. Foley, Springfield.	G. W. Pipe, St. Louis.
W. G. Gains, St. Louis.	Angelo Powell, St. Joseph.
T. Gooch, Kansas City.	J. Chapman Smales, St. Joseph.
J. Johnson, St. Louis.	H. Steinman, St. Louis.
A. Eliot Lynch, St. Louis.	W. C. Slicer, St. Louis.
James McGrath, St. Louis.	Geo. K. Thompson, St. Louis.
W. H. Melcher, St. Louis.	A. Weber, St. Louis.
F. B. Miller, Jefferson City.	Geo. Raby, St. Louis.

The third meeting was held for the transaction of minor business relating to the business of this fifth annual convention. The fourth meeting was held at Lindell Hotel, January 8, 1889, the following names being dropped from the roll of membership for non-payment of dues:

P. F. Maher, St. Louis.	M. J. Scholer, Kansas City.
M. A. Diag, Kansas City.	B. Von Unworth, Kansas City.
J. L. Parkinson, Kansas City.	T. R. Tinsley, Kansas City.

Mr. J. C. Sunderland, a member of the Kansas City Society of Architects, was elected a member of this Association.

E. F. FASSETT,
Secretary.

Treasurer John Beattie reported receipts, \$218.39; expenditures, \$449.03; balance in treasury, \$173.46.

The treasurer's report was received and Messrs. A. F. Rosenheim and J. Oliver Hogg appointed auditing committee.

The secretary submitted the following as his report: The report includes the full list of members in good standing to date, including new members.

To the President and Members of the Missouri State Association of Architects:

GENTLEMEN,—In compliance with Section 5 of the Constitution I herewith tender my report as secretary for the year 1888.

The proceedings of the fourth annual convention were revised and published in the intermediate number of THE INLAND ARCHITECT for January, 1889.

The amount of correspondence received and answered has been very limited.

At the request of the secretary of the Western Association of Architects, I forwarded to him a full list of our membership.

There have been dropped from the roll of membership the names of thirty-one members for non-payment of dues, the names of which will appear in the report of the executive committee. One member has been removed by death, Mr. A. H. Ramsden, of Kansas City.

There have been two new members elected, Mr. Henry Van Brunt and J. C. Sunderland, of Kansas City.

There are fifty members in good standing, the list of membership being herewith annexed.

The following publications have been received, and their receipt acknowledged: "Second Annual Convention of the National Association of Builders," "Constitution and By-Laws of the Western New York State Association of Architects," "Application of Graphical Statics," by James R. Willett, architect; also several reports of the different committees of the National Association of Builders, and from THE INLAND ARCHITECT all the several numbers containing reports and proceedings of the previous meetings of this association.

Your secretary would recommend that some arrangements be considered to have the proceedings of each convention either published in pamphlet form or transcribed into a general record book. At present if any information is wanted in regard to previous actions of the convention recourse has to be had to the back numbers of THE INLAND ARCHITECT which causes a great inconvenience, especially if the secretary does not have in his possession the numbers complete.

Yours respectfully,
E. F. FASSETT, Secretary.

T. B. Annan, St. Louis.	O. P. Koenig, St. Louis.
Geo. J. Barnett, St. Louis.	Frank A. Renick, St. Louis.
L. C. Buckley, St. Louis.	A. F. Rosenheim, St. Louis.
John Beattie, St. Louis.	Fred Widmann, St. Louis.
Thos. W. Brady, St. Louis.	James Bannon, Kansas City.
T. J. Furlong, St. Louis.	S. E. Chamberlain, Kansas City.
P. P. Furber, St. Louis.	A. B. Cross, Kansas City.
J. N. Herthel, St. Louis.	E. F. Fassett, Kansas City.
C. C. Hellmers, St. Louis.	F. B. Hamilton, Kansas City.
E. C. Jansen, St. Louis.	J. O. Hogg, Kansas City.
C. E. Illsley, St. Louis.	F. M. Howe, Kansas City.
L. Kledus, St. Louis.	W. F. Hackney, Kansas City.
J. B. Legg, St. Louis.	G. M. D. Knox, Kansas City.
Theo. C. Link, St. Louis.	L. L. Levering, Kansas City.
C. F. May, St. Louis.	W. S. Matthews, Kansas City.
J. T. Mitchell, St. Louis.	Wm. Nier, Kansas City.
J. B. McElfatrick, St. Louis.	H. Probst, Kansas City.
J. H. McNamara, St. Louis.	W. W. Polk, Kansas City.
J. D. de Pombiray, St. Louis.	H. B. Pruden, Kansas City.
C. K. Ramsey, St. Louis.	A. Van Brunt, Kansas City.
W. Albert Swazey, St. Louis.	H. Van Brunt, Kansas City.
J. S. Taylor, St. Louis.	J. C. Sunderland, Kansas City.
R. W. Walsh, St. Louis.	Edward Eckel, St. Joseph.
Thos. Walsh, St. Louis.	Geo. Mann, St. Joseph.

The following report of the Kansas City Chapter of the Missouri State Association of Architects, for the year 1888, was read by the secretary:

To the President and Members of the Missouri State Association of Architects:

GENTLEMEN,—We beg leave to report as follows: There are twenty-one members in good standing.

Five have been dropped from the roll for non-payment of dues.

Withdrew, one. Lost by death, one (A. H. Ramsden).

The meetings have been fairly well attended. The best of feeling prevails in the society; and there has not been a single act of unprofessional practice committed to the best of our knowledge, and we deem our society a great benefit to us.

Respectfully submitted,
G. M. D. KNOX, Secretary.

C. E. Illsley, chairman of the Committee upon Jurisprudence, made a report in which he said: This committee was appointed at my suggestion,

and I have labored hard over the matter of a league for mutual defense, and met so many difficulties that, were it not that it was in successful operation by the Société de Centrale of Paris, I should say it was not practicable. In a general informal discussion this morning it was urged that if the association pushed the claim of the individual in court it would rule out the evidence of architects. Another objection would be the trades unions' attitude, which was not desirable. First-class legal talent would have to be employed, and would architects in distant cities accept an unknown lawyer? As an association we would not be able to form a collection agency, but only try such cases as involved a precedent. The Illinois association are laboring with the same question. We wish to see what result they arrive at, and to obtain further information in regard to the former society, and would ask for further time and simply report progress.

On motion the committee was given further time.

Mr. McNamara called for the report of the Committee on State Bill for Licensing Architects, and a general review of what had been done was gone into by the assembly. No report had been made by the committee in charge a year ago, and the discussion developed by several speakers showed that the bill had passed to second reading in the legislature and some amendments had been made by the state association. The state of Ohio had also pushed the matter. The necessity of developing a public sentiment in its favor before the bill could pass was urged. There was a proposition that a committee go to Jefferson City in relation to lien law and this subject could be introduced at the same time.

The discussion was dropped for the time being without action.

The auditing committee reported the treasurer's report correct.

The following letter from the St. Louis Architectural League was read by the secretary:

January 8, 1889.

To the Members of the Missouri State Association of Architects, in convention assembled:

SIRS,—There has been organized, in St. Louis, a society of architectural draftsmen, known as The St. Louis Architectural League. They have secured and furnished rooms at 515 Olive street, and they particularly desire that the visiting members of the Missouri State Association should avail themselves of the use of the rooms of the League. The rooms will be open at all times, and will be at the disposal of your members.

The drawings of the first and second competition of the League are on exhibition, and we should be glad to have your members see the first efforts of the League.

I am very sincerely yours,

N. E. EAMES, Sect. St. L. A. L.

On motion of Mr. Hogg, the invitation was accepted.

A communication was received from Napoleon T. Allard regarding foreign architectural societies, and, on motion, Mr. Allard's suggestions were accepted and ordered spread upon the records of the Association.

A general discussion was held in regard to the state lien law. The change or amendment wished for was the insertion of the word "architect."

Mr. Hogg submitted the following resolution:

Resolved, That a committee of three be appointed by the Chair to take such action as may seem necessary to secure the passage of a law requiring a practicing architect to either pass an examination or procure a state license.

Mr. McNamara moved, as an amendment, that the Western Association of Architects' bill for the examination and licensing of architects be taken up and pressed in the state legislature.

Mr. Fassett offered the following substitute:

Resolved, That the committee appointed in 1887 on the bill for the licensing of architects be continued, with the same powers as heretofore granted.

On Mr. Hogg withdrawing his motion, and Mr. Fassett's being seconded, the motion prevailed.

The legislative committee appointed was C. K. Ramsey, J. H. McNamara, C. E. Illsley, C. C. Hellmers, George Carman, G. M. D. Knox, W. S. Matthews.

A telegram was received from W. A. Swazey, Washington, D. C., conveying best wishes to the success of the convention.

A resolution was offered by Mr. Illsley that each member receive on the first of each current association year a certificate of membership, substantially according to the following form:

MISSOURI STATE ASSOCIATION OF ARCHITECTS.

This certifies that Mr., architect, of Mo., is a member in good standing for the year, As such he is commended to the professional courtesies customary among architects he may visit in other places.

This certificate must be renewed at the annual convention of each year.

..... President.

..... Secretary.

Mr. Hogg submitted the following resolution:

Resolved, That a committee of three be appointed to draw up resolutions in regard to the death of our brother, Mr. A. H. Ramsden, and that a copy of those resolutions be forwarded to Mrs. Ramsden.

Messrs. Hogg, Matthews and Knox were appointed committee to draft resolutions.

The report of Committee on Lien Law was called for.

Mr. C. C. Hellmers, chairman of committee, made an informal report of progress. He narrated his experience with the St. Louis Mechanics' Exchange, and had come to the conclusion that the best thing to do would be the adoption of a clause in the Illinois lien law which made the owner responsible for the payment of material or labor.

On motion of Mr. Illsley, the report of the committee was received, and the committee discharged.

The following letter, from the secretary of the Kansas City Society of Architects, was read by the secretary:

KANSAS CITY, Mo., January 1, 1889.

Chas. K. Ramsey, President Missouri State Association of Architects.

DEAR SIR,—The following resolution was adopted by our local society at a special meeting, yesterday afternoon.

"Resolved, That the Kansas City Society of Architects recommend that when the Missouri State Association of Architects meet in St. Louis, January 8, 1889, that, after the transaction of the regular business of the convention, they, as a body, adjourn to meet at Jefferson City on the day following, for the purpose of urging an amendment to the state lien law, so as to include architects, and that a copy of this resolution be forwarded to the president and secretary of the State Association."

G. M. D. KNOX, Secretary.

I will state that this was brought about by a conversation with one of the representatives from this district and one of our members; he said that he would do all in his power to have such amendment passed.

The letter and the general subject of the state lien law was discussed. Mr. Fassett presented the following resolution:

Resolved, That the St. Louis Architectural League be invited to make competition sketches for membership certificate of Missouri State Association of Architects, subject to approval of the Executive Committee, and that a premium of \$5 be paid for such approved sketch.

The motion was seconded by Mr. Illsley, and upon discussion was amended to make two premiums of \$10 and \$5 each, in which shape the resolution was adopted. The session then adjourned to meet on Wednesday, at ten o'clock.

SECOND DAY—MORNING SESSION.

In the temporary absence of the president, Secretary Fassett called the assembly to order, and Mr. McNamara was appointed temporary chairman. The secretary called the roll and the reading of the minutes was dispensed with.

An hour was occupied with a general discussion upon the state lien law, and it was finally concluded that it would be proper for the association to only seek amendment to that portion which involved their profession. In this connection, the following resolution was unanimously passed:

Resolved, That this association endeavor to get the word "architects" inserted in the present lien law, also that the preposition "upon" be changed to read "upon or for," and that this association, when it adjourns, adjourns to meet in Jefferson City after the bill has been introduced and referred to committee.

The following resolution was offered by Mr. Illsley, and, on motion, seconded by Mr. Fassett, was adopted:

Resolved, That the word "architects" should be included in that portion of the Missouri statutes which exempts lawyers, clergymen, teachers and other professional men from municipal taxation, and that this be entrusted to the Lien Law Committee of this association.

The last two resolutions were, on motion, reconsidered, and the following resolution was adopted after considerable discussion:

Resolved, That the Committee on State License Law be increased by the chair to seven names instead of five, and that they be instructed to visit Jefferson City on call in the interest of proposed changes in the laws concerning liens, the municipal taxation of professional men, the state licensing of architects and other matters of interest to our association, and that their traveling and hotel expenses be chargeable to this association.

This resolution was followed by the passage of the following resolution, introduced by G. M. D. Knox.

Resolved, That the Kansas City members of the Missouri State Association of Architects in attendance at this convention go to Jefferson City after adjournment, to have introduced law concerning liens, the taxing of professional men, and other legislation affecting architects.

The committee appointed under these resolutions consists of C. K. Ramsey, chairman; J. H. McNamara, C. E. Illsley, Geo. Corman, C. C. Hellmers, G. M. D. Knox, W. S. Matthews.

Mr. Illsley introduced the subject of a protest entered by the architects of Massachusetts against the competition scheme to secure plans for a state house, as advocated by the *American Architect*, and introduced the following resolution:

The Missouri State Association of Architects assembled in convention at St. Louis, January 8, 1889, unanimously indorses the accompanying protest against the conditions on which competitive plans are invited for the Massachusetts State House, and recommend that all members of this association abstain from participating until the conditions are changed as requested in this protest.

Resolved, That we consider that the taxpayers are entitled to the best architectural services in this country for the design and erection of public buildings. Also that the best element in our profession is equally entitled to compete for public work without being excluded by conditions which experience has shown to be unjust, impracticable and harmful alike to the public interests and to the architectural profession.

Resolved, That the secretary be instructed to transmit these resolutions to the commissioners of the Massachusetts State House.

The protest against the competition for the Massachusetts State House referred to in the resolution is as follows:

Boston, Mass., December 18, 1888.

The Commonwealth of Massachusetts has, by its commissioners, advertised for designs for the State House extension, said designs to be furnished in open competition. The conditions of the competition, as announced, have evidently been framed without due regard to the best custom in the conduct of such matters, the sole end and aim of which should be to secure to the state the best service by making sure that "the best men shall take part; that they shall be encouraged to do their best; that the best they offer shall be selected; and that the author of the successful design shall be employed as architect, providing the building is built, and he is competent."

The conditions announced are faulty:

First. In that they are not drawn up in accordance with the best custom, and no assurance is given that an expert adviser will be employed to aid the commission in their choice.

Second. That no assurance is given that the successful competitor will be employed, but, on the contrary, it is distinctly stated that all premiated competitors are to relinquish all ownership in their plans to the state, without any further claim to compensation or employment.

Third. Even if the first prize in the competition were as it should be, the execution of the building, the actual prizes offered would still be entirely insufficient compensation to the authors of the drawings placed second and third.

The committee on resolution upon the death of Mr. Ramsden, reported the following resolution:

St. Louis, January 8, 1889.

Missouri State Association in convention assembled:

WHEREAS, It has pleased an All-wise Providence, the Architect of the Universe, to cause to be dropped from the roll of membership in this association, the name of A. H. Ramsden; therefore, be it

Resolved, That this association present to Mrs. Ramsden our deep sympathy in the loss of a kind and loving husband, and that this association and the profession at large have lost a bright and promising associate.

Resolved, That a copy of these resolutions be published in THE INLAND ARCHITECT, and a copy forwarded to Mrs. Ramsden.

JAMES OLIVER HOGG,
G. M. D. KNOX,
W. S. MATTHEWS.

Frank A. Renick offered the following resolution:

Resolved, That the state convention of the architects assembled hereby request the municipal assembly of this city to recommend an amendment to the city charter to the effect to make the commissioner of public buildings a member of the board of public improvements.

L. Kledus explained that in the formation of the city charter the building interests were ignored and no commissioner was enrolled, and hence the commissioner holds a clerical position, and that the architects should

endeavor to aid in placing the building commissioner on the board of public works.

On motion the resolution was adopted.

The meeting adjourned to 2:20 o'clock.

SECOND DAY—AFTERNOON SESSION.

On calling the meeting to order, President Ramsey announced the next business before the convention to be the election of officers for the ensuing year.

For president, Mr. Bulkley nominated E. F. Fassett, Mr. Hogg nominated T. B. Annan, Mr. Matthews nominated G. M. D. Knox. Mr. Fassett, receiving a majority of the votes, was declared elected president.

On being called upon for a speech, Mr. Fassett briefly thanked the association for the honor conferred. He hoped that the work of the coming year would not only prove of great benefit to the association but to the profession at large.

For vice-president, Mr. Bulkley nominated C. E. Illsley, and upon motion of Mr. McNamara nominations were closed, and the secretary instructed to cast a ballot for the association. Mr. Illsley was declared elected vice-president.

For secretary, J. Oliver Hogg and C. C. Hellmers were nominated. Mr. Hellmers withdrew in favor of Mr. Hogg, and on motion the nominations were closed, the secretary cast the ballot for the association and Mr. Hogg was declared elected secretary.

For treasurer, James Beattie was unanimously re-elected.

For trustees, Mr. Bulkley nominated H. B. Hamilton, G. M. D. Knox and A. F. Rosenheim and they were duly elected.

On motion, C. E. Illsley was unanimously re-elected corresponding secretary.

The following resolutions were introduced and adopted:

Resolved, That the thanks of this association be extended to Messrs. Hurlbut & Howe, proprietors of the Lindell Hotel, for the many courtesies extended, and the use of this convention hall.

Resolved, That the Kansas City members hereby extend to our St. Louis brethren our hearty thanks for the most generous and beautiful entertainments they have shown us during this convention.

Before adjournment it was decided that a delegation from the association should immediately go to Jefferson City to ask that the proposed reforms be acted upon by the legislation in session.

On motion, the convention adjourned to meet at Kansas City, the second Tuesday in January, 1890.

After adjournment, the new Executive Committee held a meeting, at which applications for membership were considered.

J. U. Heimbürger and August Webber, of St. Louis, and Walter C. Root and J. K. Guinotte, of Kansas City, were elected to membership.

First Meeting of the Consolidation Committee A. I. A. and W. A. A.

PURSUANT to the resolutions adopted at the late conventions of the American Institute of Architects and the Western Association of Architects, the Committees on Consolidation of the A. I. A. and W. A. A., appointed by the two societies, met on January 7, 8 and 9, at the rooms of the American Institute, in the Welles Building, New York.

There were present, on behalf of the Institute, Emlin T. Littell, chairman, and E. H. Kendall, of New York; Alfred Stone, of Providence, and James G. Cutler, of Rochester. D. H. Burnham, of Chicago, the fifth member of the Institute Committee, being unavoidably absent, had sent a letter setting forth his views.

The committee representing the Western Association consisted of Dankmar Adler, chairman, of Chicago; W. W. Carlin, of Buffalo; John W. Root, of Chicago; Adriance Van Brunt, of Kansas City, and George B. Ferry, of Milwaukee, all of whom were present.

On coming together informally, Mr. Adler gave a statement of the position of the committee in its representation of the views of the W. A. A., its main feature expressing the belief that any system of unification, to carry the vitality necessary to success, must be based on principles of equal fellowship. The committee then separated to consider and act upon this proposition.

The Institute Committee also took up the communication presented from Mr. Burnham. On reassembling after these separate sessions, a committee of the whole was formed, Mr. E. H. Kendall being chosen chairman and Mr. George B. Ferry secretary. The committee at once proceeded to consider the various matters incident to the scheme of consolidation, which embraced the draft of a constitution and by-laws, a circular letter to the members of each association and the recommendation of a place for holding the first convention.

Then followed three days of active hard work, characterized by the most hearty coöperation on the part of every member of the committee. The discussion was full, broad and of the most cordial nature, and every effort was made to embody such features in the rules to be recommended as would promote the vitality of the new organization.

The belief prevailed that every stimulus should be given to the ambition of members, to seek preferment at the hands of their associates; also, that much of the animosity and ill feeling arising between individuals was due to a lack of acquaintanceship.

To promote good fellowship, the annual convention, with its attendant social features, was looked upon as an essential requisite, and steps were taken to prevent the burden of expense falling upon the fellows resident at the place of meeting.

It was also believed that the administration should be left within the control of the convention to the utmost degree, while the executive portion should be administered by the fewest number necessary for the efficient handling of the work.

Nothing was more agreeable to the members of the committee than to find that anticipated fears of disagreement were entirely groundless, and it

is believed that every member carried away with him not only feelings of the most agreeable nature as to the work accomplished and the cordiality of relations between the members, but the belief that the scheme of consolidation, as formulated, will meet with approval on the part of the members of each association, and that it will mark an important event in the history of the architectural profession in this country.

Illinois State Association of Architects.

AT the regular meeting of the Illinois State Association of Architects the order of business was a visit to the Auditorium Building, in process of erection by Architects Adler & Sullivan.

The following architects were present:

W. W. Boyington, Henry Ives Cobb, Clarence L. Stiles, H. B. Hill, L. D. Cleveland, Otto Matz, O. J. Pierce, Robert C. Berlin, H. M. Hansen, J. L. Silsbee, Louis H. Sullivan, Clinton J. Warren, Normand S. Patton, Smith M. Randolph, Alfred Smith, C. M. Palmer, L. J. Schaub, Samuel A. Treat, George Beaumont, Frank L. Lively, W. W. Clay, William Zimmerman.

After the usual lunch had been served (the punch was exceptionally well designed and executed), in the absence of the president Mr. Treat called the meeting to order and said:

S. A. Treat: We are the guests this afternoon of Mr. L. H. Sullivan, who will take us over the Auditorium Building, and as it will take two hours at least to do this, I suggest that a motion to adjourn be made and that we immediately place ourselves in his hands.

On motion the meeting adjourned, and the procession headed for the corner of Wabash avenue and Jackson street.

Entering the massive building by what will be the entrance to the Auditorium proper, the first thing Mr. Sullivan called attention to was the piles of brick extending almost to the ceiling, and explained that this was loading the tower foundations, and as the work progressed the weight was gradually removed.

The sewerage system was closely inspected. This is all below sewer level and all lead to a reservoir about 5 feet deep and 8 feet in diameter, from which the sewage is forced by a Shone ejector. The boilers of the auditorium and the hotel are located separately; the former, six in number, and the latter five in number. The smokestacks are 4 feet 8 inches and 6 feet 2 inches in diameter, respectively. The scene house, which occupies a space 116 by 66 feet, was interesting in many particulars. Below this is a pit 22 feet below grade, which has a concrete floor 3 feet thick, absolutely watertight, which is estimated to be heavy enough to resist the pressure of water from below. Twenty-two pits, 4 feet 8 inches in diameter, are dug to a depth of 47 feet below sidewalk level, to contain cylinders for operating the stage.

During the inspection of these subterranean depths, the slipping from narrow planks into the soft clay, the climbing up and down ladders and over masses of material illustrated the difficulty of proper inspection and superintendence of some parts of an architect's work. After the various lost rubbers had been fished out of the mud, and Mr. Clay, who fell down a sharply-inclined plank (producing a strange mixture of clays), had regained his feet the procession moved toward the upper regions.

Passing through the basement the system of indirect heating was examined. The air entering through a huge duct from the roof passes over steam coils, occupying a space of about 20 by 70 feet. It is then carried up above the auditorium and distributed through openings in the ornamentation. A cold air box for summer use is also provided for through which the air passes over ice before distribution. The capacity of this heating and ventilating apparatus is about 5,000,000 cubic feet of air per hour, which is the time taken to completely change the air in the auditorium.

Passing up the main stairway, above which is a truss supporting 750,000 pounds, the main foyer is entered. From this a full view of the main auditorium is obtained. The floor of this main foyer will be paved with tile. The main floor will seat 2,000, and is 116 by 64 feet between walls. The second foyer, which is directly above, will be carpeted.

There will be two tiers of boxes along each side of the auditorium connected with the first and second galleries. All electric lights will be distributed in the ornamentation, and no fixtures will be used. The floors of the entire auditorium will be of slabs of concrete.

Attention was here called to the series of elliptical arches which gradually narrowed toward the proscenium arch. The outer arch has 118 feet span; the inner arch, 80 feet span. These will form a sounding-board, and are ornamented. All raised ornaments are in stucco. A great deal of air is introduced through ventilators in these arches, and the air is drawn out through ventilators in the risers under the tiers of seats. It was noted that each tier of seats was raised four inches. In connection with the main auditorium are many cloak rooms, etc. The gentlemen's smoking room is about 40 by 60 feet. After inspecting the first gallery, containing 1,900 seats, the second and third galleries are reached, and it is noticeable that the upper balcony extends for some distance out from the second balcony—a unique feature in theater construction.

The most interesting feature of these upper galleries is the curved ceilings, which are constructed of light iron girders covered with wire cloth. These are hung from the trusses above on a hinge, and can be lowered to join the gallery front, thus shutting off these galleries at will. Each is divided in two sections, are operated by continuous shafts, and are raised and lowered by winches. Reference having been made to the strange mixture of clays in the basement, when Mr. Clay fell down, that gentleman observed that this ceiling was evidently the work of a crank. The magnificent organ now being constructed in Boston will occupy a loft 18 by 23 feet, 45 feet high, at the right of the proscenium arch. It will receive its power from an electric motor.

The rehearsal hall is on the tenth floor, is about 48 by 75 feet, and will seat 540 people.

Clambering through a window, which proved an uncrossed Rubicon to several of the heavy weights, a great many interesting points in the general

construction were seen. The truss members extending outside the walls were covered with fireproof material, and this in turn protected by copper flashing. The fresh air duct was examined. This is ten feet square and will be lined with cement, and contain a vertical arrangement of pipes to spray water to cleanse the air from all impurities. It might be noted that three stories, which will contain servants' quarters, etc., and a dining room 44 by 172 feet, are supported by three trusses over the proscenium arch.

After wandering over sections of roof and climbing through windows, a ladder leading through a narrow opening was ascended (by those who could squeeze through) and the tower was reached and a most magnificent view of the city obtained.

The afternoon was drawing to a close, and the body dispersed, all feeling not only fully paid for the time spent, but grateful to Architect Sullivan for the courtesy extended. The next meeting will be held February 18.

National Association of Builders.

IN preparation for the third annual convention of the National Association of Builders, which will be held at Philadelphia, February 12, 13 and 14, the following circular has been issued by order of the Executive Committee to the secretaries of exchanges:

The question having arisen as to the propriety of action being taken on the Uniform Contract, by local associations of builders, affiliating with the National body, it has been thought best to caution all such bodies that no action whatever is at present desired.

The Committee on Uniform Contract is not yet discharged. It will make its report at the coming convention of the National Association, and will probably ask that similar action be taken to that already taken in the associations of architects interested, namely: *The report approved as presented, and the committee continued.*

It should readily be seen that this document, to be of value, must be kept absolutely uniform, and to preserve this uniformity changes should only be made through those authorized to make them as the representatives of the three parties concerned; therefore, the joint committee of the architects and builders must be kept in existence for this special purpose, and its work cannot be considered as complete until it has had opportunity to study the document in its practical use during a reasonable period of trial, prior to making a final report and receiving a discharge.

Suggestions for changes should be forwarded to the committee for its consideration, through the secretaries of each association, and all builders are requested to offer their recommendations, whether presented as individual opinions or as the voice of their organizations, through the National secretary.

All filial bodies are requested not to take specific action, either of approval or disapproval of the contract itself, but to endeavor to secure its thorough adoption, in order that its good and bad points may be discovered by practical demonstration, and the committee thereby furnished with means to perfect the document and complete their labors to the satisfaction of all concerned.

By order of the Executive Committee.

WM. H. SAYWARD, Secretary.

The following circular of information has been issued, and should be carefully read and observed by delegates:

Transportation.—Arrangements have been made for reduced passenger rates on all railroads coming under the jurisdiction of the Central Traffic Association, the Trunk Line Association and the Southern Passenger Association.

Care should be taken when purchasing tickets for Philadelphia to ask the ticket agent for a "return certificate."

This certificate must be presented to the secretary of the convention for his signature, and the holder will then be entitled to a *return ticket* at one-third of the regular fare.

No reduction on the fare will be allowed unless certificates are obtained at point of departure, and the same countersigned by the secretary as above stated.

Hotels.—Accommodations have been secured at the Continental Hotel and Girard House, which are located upon opposite corners of Ninth and Chestnut streets.

Badges.—In order that delegates may be readily distinguished, badges should be worn, with name of association and city printed thereon.

Place of meeting.—The convention will be held in the lecture hall of the Franklin Institute, which is located on Seventh street, north of Chestnut street, only a few minutes walk from the hotels.

Sessions.—The convention will be opened on Tuesday morning, February 12, at 10 A.M. Morning and afternoon sessions will be held each day, and also in the evening if found necessary.

Credentials.—Each delegation should present a credential from its association, giving names of all delegates and alternates.

Voting.—All votes in the convention must be announced by the chairman of each delegation.

Resolutions.—Resolutions must be presented in manuscript or typewriting, and in duplicate, both copies signed by the party offering them.

By order of the Executive Committee.

WM. H. SAYWARD, Secretary.

The programme of the third annual convention of the National Association of Builders is as follows:

TUESDAY, FEBRUARY 12, 1889—MORNING SESSION, 10 O'CLOCK.

1. Opening address, by the president; 2. Appointment of Committee on Credentials; 3. Recess for presentation of credentials.

AFTERNOON SESSION.

1. Report of Committee on Credentials; 2. Roll call; 3. Reading of minutes; 4. Offering and reading of resolutions and communications; 5. Appointment of committee to report time and place of next convention, and to nominate officers; 6. Report of secretary; 7. Report of treasurer; 8. Reports of standing committees; 9. Reports of special committees.

WEDNESDAY, FEBRUARY 13—MORNING SESSION.

1. Consideration of report of Committee on Uniform Contracts; 2. Consideration of report of Committee on Lien Law; 3. Consideration of report of Committee on Rules and Conditions for Estimating Work; 4. Consideration of report of Committee on Permanent Arbitration; 5. Consideration of report of Committee on Bureau for Furnishing Sureties on Builders' Estimates and Contracts; 6. Consideration of report of Committee on Apprenticeship System; 7. Consideration of report of Committee on Uniformity of Measurements and Uniform Size of Brick; 8. Consideration of report of Committee on Insurance against Accidents to the Public.

AFTERNOON SESSION.

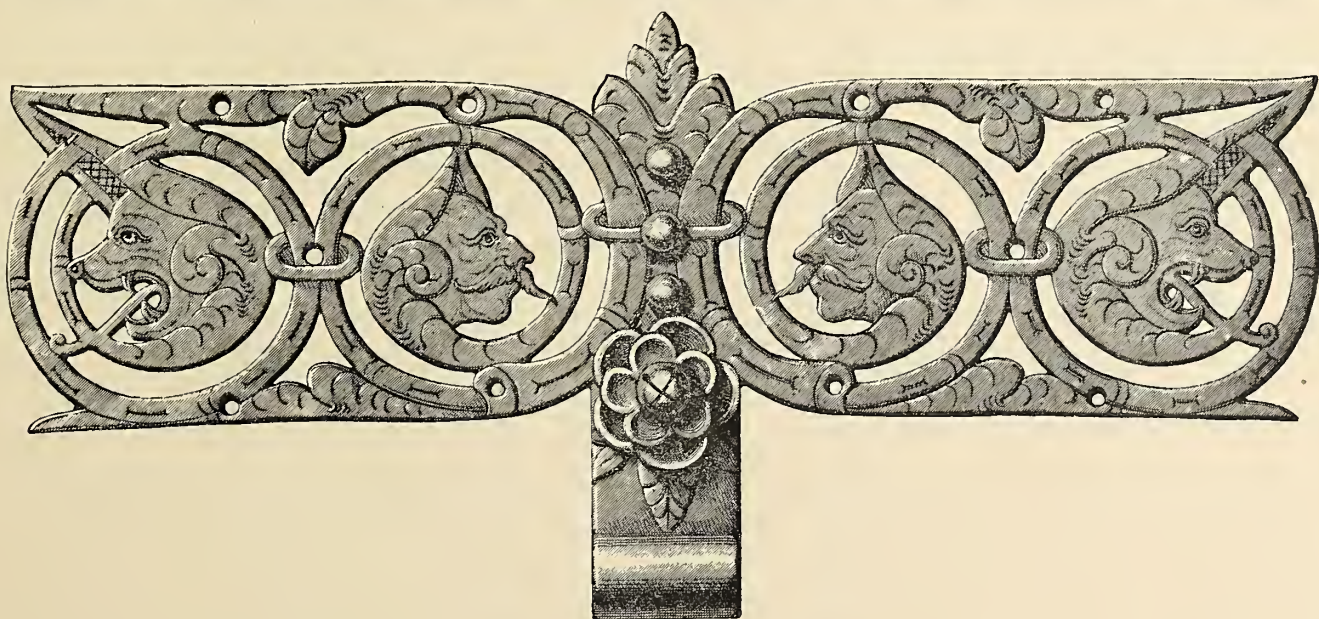
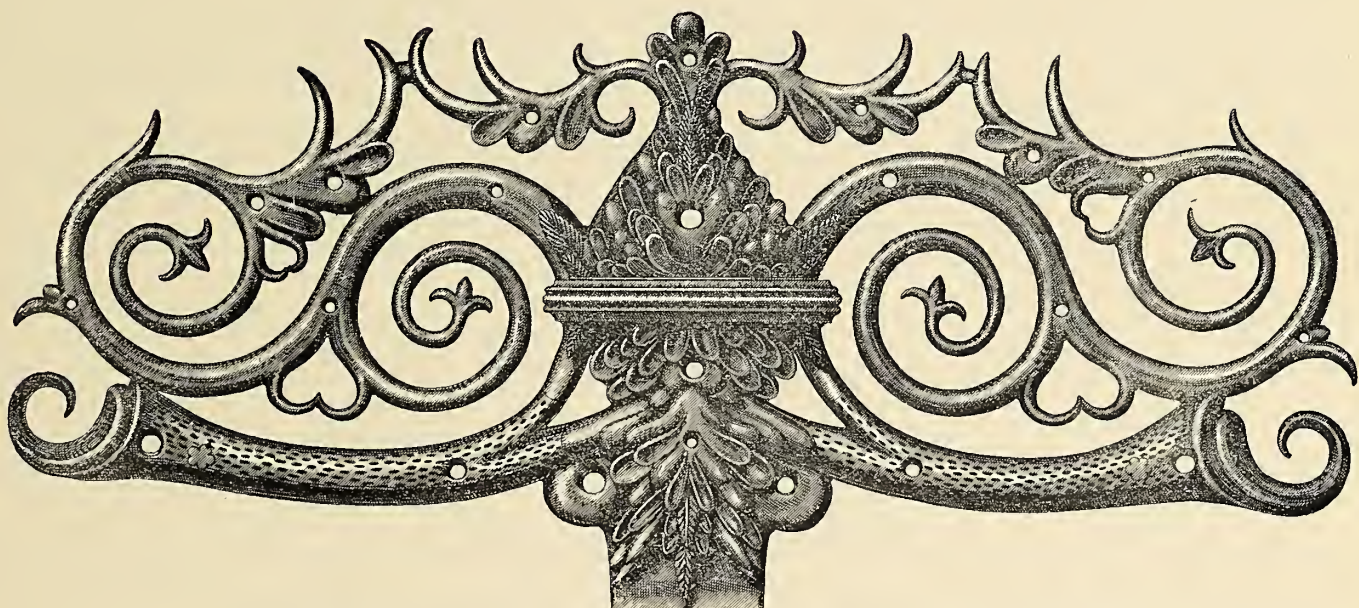
1. Address, by Mr. James John, of Chicago, on "Plastering and Stucco Work"; 2. Address, by Mr. Samuel J. Creswell, of Philadelphia, on "Iron Work—Past and Present"; 3. Address, by Mr. John J. Tucker, of New York, on "Masonry"; 4. Address, by Mr. Wm. H. Sayward, of Boston, on "Builders' Exchanges—their Opportunities and Advantages."

THURSDAY, FEBRUARY 14—MORNING SESSION.

1. Address, by O. P. Hatfield, Esq., of New York, treasurer of American Institute of Architects, on "The Relation of the Architect to the Builder"; 2. Address, by George Eastburn, M.A. of Philadelphia, on "The Metric System"; 3. Address, by Col. Richard T. Auchmuty, of New York, founder of the mechanical trade schools of that city, on "Trade Training."

AFTERNOON SESSION.

1. Report of Committee on Resolutions, and consideration of same; 2. Report of Committee on Time and Place of next Convention, and Nomination of Officers; 3. Election of officers; 4. Naming and electing of directors; 5. Presentation of badges; 6. Unfinished business; 7. New business; 8. Adjournment.



Chicago Builders' and Traders' Exchange.

THE fifth annual meeting of the Chicago Builders' and Traders' Exchange was held January 21. The election of officers, which was by ballot, commenced at twelve and closed at five o'clock. There were two tickets in the field, a regular ticket selected by the nominating committee, and an "opposition" ticket, the latter being purely to give interest to the election, and in no way antagonistic to the regular ticket.

The nominating committee consisted of Chas. W. Gindele, chairman, Walter T. Clark, John Angus, M. J. Sullivan, John W. Dunn.

The regular ticket and the opposition ticket were as follows:

REGULAR TICKET FOR 1889.	OPPOSITION TICKET FOR 1889.
For President. D. V. Purington.	For President. F. Blair.
For Vice-President. C. A. Moses.	For Vice-President. Mat. Benner.
For Second Vice-President. H. J. Milligan.	For Second Vice-President. Patrick Edgeworth.
For Treasurer. William Grace.	For Treasurer. Emanuel Earnshaw.
For Secretary. James John.	For Secretary. T. A. Dungan.
For Board of Directors. (For Two Years.) Robert Vierling. C. B. Kimbell. E. V. Johnson. P. Farrell. John Sutton.	For Board of Directors. (For Two Years.) Adam J. Weckler. M. B. Madden. Henry Martin. R. F. Conway. W. L. Hoffman.
For Inspectors of Election for 1890. James A. Miller. M. W. Powell. A. W. Murray.	For Inspectors of Election for 1890. Fred G. Cobb. C. G. Bishop. J. J. Maloney.

At eight o'clock the members of the Exchange met in the Exchange rooms to transact the annual business, President George Tapper in the chair. About 125 members were present.

Secretary James John read the minutes of the previous meetings of the year, and on these being approved the following report of the Board of Directors was read by the secretary:

To the Builders' and Traders' Exchange:

Your Board of Directors, believing that in addition to the statistical reports of the secretary, and the financial report of the treasurer, the records of the Exchange should each year be supplemented by a brief summary of the work performed, beg leave to submit the following as their report for the year 1888.

At the close of the year 1887 the list of membership included 509 names. On January 1, 1889, it had been increased to 574. The net gain for the year being sixty-five. During the year 114 applications for membership were received, which of itself is sufficient indication that the standing of the Exchange is still high in the estimation of our citizens who are engaged in building up this city. During the past year six of our members have been taken from us, and while appropriate resolutions in memory of their lives and services have been passed and made a part of the Exchange's record, your Board of Directors wish to bear this further testimony in behalf of these six brothers whose places can never be filled, and with whom it had been an honor to be associated. With one exception all of them had passed the meridian of life, and without an exception were the peers of any in their chosen avocations, and have left behind them records as builders and citizens of which we, their former associates, are justly proud.

The financial condition of the Exchange, as shown by the report of the treasurer, will bear the closest investigation, and the gain of \$1,811.81 over a year ago speaks volumes for the prosperity of the Exchange. Especially is this true in view of the necessary outlay on account of enlargement and refurnishing of the rooms of the Exchange. It would seem unnecessary to call the attention of the Exchange to its present quarters, but it is a matter of congratulation to your Board of Directors that while there are many opinions regarding the practicability of the proposed changes, they have never heard a criticism upon the results.

Upon the recommendation of the Committee on Finance your Directors approved of an investment of \$7,000 of the funds of the Exchange in W. C. C. Railway bonds.

At the present time we have in bonds and cash.....\$11,669.69
and furniture, fixtures and library valued at..... 5,363.11

making a total of available assets of\$17,032.80

The decisions of the Committee on Arbitration have always been unanimously approved by the Board of Directors, and have generally been satisfactory to the parties immediately interested; but one or two cases have been presented for arbitration which your Board considered trivial, and which ordinary business courtesy and forbearance should have settled without reference to the committee. This committee should never be used in lieu of a justice court for the collection of bills, or reference to it be used as a threat to enforce such collection. Its object is to harmonize honest differences of opinion between members who, by such submission to arbitration, evince desire to have such differences settled.

In conclusion, your Board of Directors feel warranted in congratulating the Exchange upon its condition. Its increase in numbers and wealth is certainly indicative of material prosperity. The harmony and friendly relations existing between individual members is the strongest evidence that we have not lost sight of the objects for which this Exchange was organized.

Respectfully submitted,
GEO. TAPPER, President.

On motion, the report of the Board of Directors was received and placed on file.

The report of the Library Committee being called for, in the absence of A. W. Murray, chairman, the secretary read the report which showed an outlay of \$87.15 expended and a balance of \$753.58 still in hand.

The fifth annual report of Secretary James John, which included Treasurer Joseph Downey's report, showed the total receipts during the year to be \$14,566; the total expenditures were \$12,754.19; balance for the year, \$1,811.81; balance on hand, including bonds, \$11,669.69; total assets of the Exchange to date, \$17,032.80.

The gain of membership for the year is 97; suspended during the year, 24; expelled, 1; transferred, 2; resigned, 4; honorary, 1; actual membership January 1, 1889, 574.

The following members died during the year: A. Knisely, R. Knisely, C. K. Proctor, J. N. Glover, Carl Winkler, John R. Onderdonk.

Appended to the treasurer's report was the certificate of the auditing committee that it was found correct.

President Tapper announced that the annual convention of the National Association of Builders would be held at Philadelphia February 12, 13 and 14, and the secretary read the programme of that convention.

Mr. Purington introduced the following resolution:

WHEREAS, The laws of the United States and of many of the individual states forbid the enforcement of a mechanic's lien upon public buildings for labor and material used in their erection, and,

WHEREAS, Contracts for such buildings are sometimes awarded to irresponsible and dishonest contractors, who, if so disposed, can obtain their money and the release of their bondsmen without discharging their obligations to their sub-contractors, therefore,

Resolved, That this Exchange urge upon the National Association the necessity of exerting its influence in the direction of changing the obligation under bonds required for the faithful performance of work so as to cover and protect all claims for work rendered and materials delivered in the execution of such contract.

In support of this resolution Mr. Purington said: It is well known that it is impossible for us to execute a mechanic's lien upon a public building. There has been one or two very serious cases during the past year where contractors for public work have defrauded material men, and it seems very important that the National Association of Builders take some action. The contractor should give a bond, or in some way protect the sub contractor. I would like to have this matter discussed.

Mr. Maloney said: I think private contracts come under the same head, and all should have to give a bond both in private and public contracts.

Mr. Gindele called attention to the fact that private work came under the state lien law, but the resolution would be a proper subject for the National Association of Builders to deal with and bring before Congress.

George C. Prussing spoke against the resolution, as he was against all lien laws. There were thirty-eight lien laws in the United States, and all faulty. In the absence of all lien laws only those entitled to credit would get it. He spoke in favor of contractors and material men being obliged to furnish a bond.

Mr. Purington said the resolution simply asked that the National Association of Builders be asked to take some action.

The resolution was unanimously adopted.

While waiting for the report of the inspectors of election, Mr. Tapper said that he wanted to thank the Exchange for its courtesy since he had occupied the office of president. It afforded him great pleasure to say that he had received nothing but courtesy and kindness from the members.

Mr. Prussing said to occupy the time while waiting for the election committee's report that he would offer the following resolution:

Resolved, That this Exchange, in convention assembled, express its opinion, that the ends of justice will be better served by the repeal of all lien laws.

The question was discussed.

Mr. Thomas Moulding spoke of a case which he had just carried up to the Supreme Court and it cost more than the money owing, and showed the uselessness of lien laws. It was better to look to the probity of the contractor in the first place.

Mr. Freeman said he would like to ask Mr. Prussing if he had anything better than the lien law to substitute.

Mr. Prussing said he need not cite instances where owners were using contractors as stool pigeons to beat material men out of their material, as such cases were too common. All the lien laws were but a fancied security, and he hoped that there would be a free discussion of the subject. He believed that every honest contractor would be benefited to have no lien law.

Adam J. Weckler was called for and said that very funny questions came up in this same lien law and narrated a case where an irresponsible contractor got a job where, in the absence of a lien law, it would have been let to a responsible contractor.

Thomas Courtney was called for and said his experience was similar to that of other speakers, and that it would be safer to have no lien law as it now was a snare and a fraud.

J. G. McCarthy demonstrated that it was probable that the lien laws were primarily conceived and put in force to protect the laboring man, and had been distorted to cover many things they had no business with.

Mr. Purington said that the filing of a bond by the contractor would cover all the points in the question, and do away with all temptation to date checks in advance, and in many other ways place a premium on dishonesty.

Mr. Prussing finally moved the previous question, and upon the motion being put to vote, the Exchange was almost unanimously in favor of the abolition of all lien laws.

A general discussion was entered into in regard to the use of the uniform form of contract. It was charged that architects did not use them, and it was held that it was the business of architects to use them, and not expect the contractor to insist on its use.

Mr. Prussing related a case where a prominent architect had said that out of fifty contractors not one had asked for the standard contract. The architect admitted that his old form was a good form, of course, a little one-sided, and that the standard contract was more equitable, but not one contractor had asked for it. The impression should not go out that the architects were opposed to the use of the contract, as the opposite was the case. The two parties in the contract were the owner and the contractor, and they were the ones to put it into effect and approve of the form. No class of architects, except the architect who lives by commissions from contractors and the architect who will not acknowledge that he is not the final judge and sole arbitrator of a contract without appeal will object to the standard contract.

President Tapper announced that the Inspectors of Election were ready to report, and the result was announced by George W. Rice, the chairman. The other members of the committee were C. B. Sheffler and C. C. Bishop.

Mr. Rice announced the whole number of votes cast, 387.

For president, D. V. Purington received 228 votes, Francois Blair, 159. Mr. Purington was declared elected president.

For first vice-president, C. A. Moses received 209 votes, Mat. Benner, 178. Mr. Moses was declared elected first vice-president.

For second vice-president, H. J. Milligan received 208 votes, Patrick Edgeworth, 177. Mr. Milligan was declared elected second vice-president.

For treasurer, Emanuel Earnshaw received 216 votes, William Grace, 169. Mr. Earnshaw was declared elected treasurer.

For secretary, James John received 208 votes, T. A. Dungan, 178. Mr. John was declared elected secretary.

For board of directors for two years, Robert Vierling received 210 votes; C. B. Kimbell, 250 votes; E. V. Johnson, 208 votes; Adam J.

Weckler, 202 votes; M. B. Madden, 208 votes, and they were declared elected directors for two years.

For inspectors of election for 1890, M. W. Powell received 208 votes; A. W. Murray, 208 votes; Fred G. Cobb, 208 votes, and they were declared elected inspectors of election for 1890.

After the election of officers was concluded, the several officers elected were called upon for remarks.

Mr. Tapper introduced Mr. D. V. Purington, the president-elect. Mr. Purington tendered thanks for the honor conferred. He was proud, that after twenty years in the contracting business he was now elected to the presidency of the Exchange, and would earnestly strive to have the *morale* of the association better when he left the chair than when it came into his hands.

The remarks of Secretary James John were listened to with attention, and on concluding he was applauded. He called attention to the fact that after a year in office a secretary just began to know how to conduct the office as it should be conducted. A secretary should be permanent as it took a long time to get acquainted with the financial standing of each member, and the hundred and one other things that was required to make a secretary's work perfect, and the longer a secretary was in office the more valuable he became to the association and his work more effective.

On motion, a vote of thanks was tendered to the retiring president and other retiring officers, and also to the inspectors of election, who had so satisfactorily concluded their labors, and the meeting adjourned.

The Mechanics' Lien Law of the State of Illinois.*

1. When lien given. SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly, That any person who shall, by contract, express or implied or partly expressed and partly implied, with the owner of any lot or piece of land, furnish labor or materials, or services as an architect or superintendent, in building, altering, repairing or ornamenting any house or other building or appurtenance thereto on such lot, or upon any street or alley, and connected with such building or appurtenance, shall have a lien upon the whole of such tract of land or lot, and upon such house or building and appurtenance, for the amount due to him for such labor, material or service.*

2. Extent of lien. The lien provided for in sections one and twenty-nine of this act shall extend to an estate in fee, for life, for years, or any other estate, or any right of redemption or other interest, which such owner may have in the lot or land at the time of making the contract.

3. Limitation. When the contract is expressed, no lien shall be created under this act, if the time stipulated for the completion of the work or furnishing materials is beyond three years from the commencement thereof, or the time of payment beyond one year from the time stipulated for the completion thereof. If the work is done or materials are furnished under an implied contract, no lien shall be had by virtue of this act, unless the work shall be done or the materials be furnished within one year from the commencement of the work or delivery of the materials.

4. Bill of Petition. The lien given by this act may be enforced by bill or petition, in any court of record of competent jurisdiction in the county in which the land or lot, or some part thereof, lies.

4a. Claim for lien to be filed—bill or petition. Every creditor or contractor who wishes to avail himself of the provisions of this act shall file with the clerk of the circuit court of the county in which the building, erection or other improvement to be charged with the lien is situated, a just and true statement or account or demand due him, after allowing all credits, setting forth the time when such material was furnished or labor performed, and containing a correct description of the property to be charged with the lien, and verified by an affidavit. Any person having filed a claim for a lien, as provided in this section, may bring a suit at once to enforce the same by bill or petition in any court of competent jurisdiction in the county where the claim for a lien has been filed. [Act approved May 31, 1887. In force July 1, 1887.]

5. Form of bill or petition. The bill or petition shall contain a brief statement of the contract on which it is founded, if expressed, or if the work is done or materials are furnished under an implied contract, the bill or petition shall so state, and shall show the amount due and unpaid, a description of the premises which are subject to the lien, and such other facts as may be necessary to a full understanding of the rights of the parties.

6. Summons—service. Upon the filing of such bill or petition, summons shall issue and service thereof be had, as in suits in chancery.

7. Notice by publication and mail. When any defendant resides or has gone out of the state, or on due inquiry cannot be found, or is concealed within this state, so that process cannot be served upon him, the complainant or petitioner may cause notice to be given to him in like manner and upon the same conditions as provided in suits in chancery.

8. Docket. Suits instituted under the provisions of this act shall be placed upon the chancery docket, and stand for trial as other suits in chancery.

9. Practice. For the purpose of bringing all parties in interest before the court, the court shall permit amendments to any part of the pleadings, and may issue process, make all orders requiring parties to appear, and requiring notice to be given, that are or may be authorized in proceedings in chancery, and shall have the same power and jurisdiction over the parties and subject, and the rules of practice and proceedings in such cases shall be the same as in other cases in chancery, except as is otherwise provided in this act.

10. Answer—replication—trial. Defendants shall answer the bill or petition under oath, unless the oath is waived by the complainant

or petitioner, and the plaintiff shall except or reply to the answer as though the proceeding was in chancery. The answer shall be regarded as the plea of the defendant, and by replication thereto an issue or issues shall be formed, which shall be tried by the court, or by a jury under the direction of the court, as the court may direct or the parties agree.

11. Quantum meruit. When the owner of the land shall have failed to perform his part of the contract, and by reason thereof the other party shall, without his own default, have been prevented from performing his part, he shall be entitled to a reasonable compensation for as much thereof as he has performed, in proportion to the price stipulated for the whole, and the court shall adjust his claim accordingly.

12. New parties. In proceedings under this act all persons interested in the subject matter of the suit, or in the premises intended to be sold, may, on application to the court wherein the suit is pending, be made or become parties at any time before final judgment.

13. Who parties in interest. Parties in interest, within the meaning of this act, shall include all persons who may have any legal or equitable claim to the whole or any part of the premises upon which a lien may be attempted to be enforced under the provisions of this act.

14. No preference to first contractor. Upon questions arising between different creditors, having liens under this act, no preference shall be given to him whose contract was first made.

15. Application of proceeds. The court shall ascertain the amount due each creditor, and shall direct the application of the proceeds of sales to be made to each in proportion to their several amounts.

16. Claims not due, etc. Parties entitled to liens under this act, whose claims are not due or payable at the time of the commencement of suit by any other party, shall be permitted to become parties to the suit, and their claims shall be allowed, subject to a reduction of interest from the date of judgment to the time such claim is due or payable.

17. Incumbrances. No incumbrance upon land, created before or after the making of a contract under the provisions of this act, shall operate upon the building erected or materials furnished, until the lien in favor of the person doing the work or furnishing the materials shall have been satisfied; and upon questions arising between previous incumbrances and creditors, the previous incumbrance shall be preferred to the extent of the value of the land at the time of making the contract, and the court shall ascertain, by jury or otherwise, as the case may require, what proportion of the proceeds of any sale shall be paid to the several parties in interest.

18. Adverse claimants. Parties claiming may contest each other's rights, as well with respect to amount due, as with respect to their right to the benefit of the lien hereby created; and upon all questions made by parties, the court shall require issues of law or fact to be formed so as to bring about speedy decision thereof.

19. Fraudulent Incumbrances. Any incumbrance, whether by mortgage, judgment or otherwise, charged and shown to be fraudulent in respect to creditors, may be set aside by the court, and the premises made subject to the claim of the complainant or petitioner, freed and discharged from such fraudulent incumbrance.

20. When trial not delayed—sale, etc. In no case shall the want of preparation for trial of one claim delay the trial in respect to others, but trial shall be had upon issues between such parties as are prepared, without reference to issues between other parties; and when one creditor shall have obtained a decree or judgment for the amount due, the court may order a sale of the premises on which the lien operates, or a part thereof, so as to satisfy the judgment: *Provided*, that the court may, for good cause shown, delay making any order of sale or distribution until the rights of all parties in interest are ascertained and settled by the court.

21. What estate may be sold. Whatever right or estate such owner had in the land at the time of making the contract, may be sold, and the proceeds of sale applied according to the provisions of this act.

22. Sale of part. If any part of the premises can be separated from the residue, and sold without damage to the whole, and if the value thereof is sufficient to satisfy all the claims proved in the cause, the court may order a sale of that part.

23. Manner of making sale. The sale shall be made in the same manner as other sales of real estate under decrees in chancery.

24. Redemption. Upon all sales under this act, the right of redemption shall exist in favor of the same persons, and may be made in the same manner as is or may be provided for redemption of real estate from sales under judgments and executions at common law.

25. When proceeds of sale not sufficient—excess. If, upon making sale of any premises under this act, the proceeds of such sale shall not be sufficient to pay the claims of all parties, according to their rights, the judgment shall be credited by the amount of such sale and execution may issue in favor of any creditor whose claim is not satisfied, for the balance due, as upon a judgment in actions of debt or assumpsit, and in case of excess of sales over the amount of judgment, such excess shall be paid to the owner of the land, or to the person who may be entitled to the same, under direction of the court.

26. Personal representatives. Suits may be instituted under the provisions of this act, in favor of administrators or executors, and may be maintained against the representatives in interests of those against whom the cause of action accrued; and in suits instituted under the provisions of this act, the representatives of any party who may die pending the suit, shall be made parties.

27. Costs. The cost of proceeding, as between creditors claiming liens and the person against whom the lien is intended to be enforced, shall abide the event of the suit; and the costs, as between creditors aforesaid, in contests relative to each other's claim, shall be subject to the order of the court, and the same rule shall prevail in respect to costs growing out of proceedings against and between incumbrances.

28. Limitation. No creditor shall be allowed to enforce a lien created under the provisions of this act as against or to the prejudice of any other creditor, or incumbrancer or purchaser, unless a claim for a lien

*Approved March 25, 1874. In force July 1, 1874. Amended and approved May 31, 1887, and June 16, 1887. In force July 1, 1887.

shall have been filed with the clerk of the circuit court, as provided in section four of this act, within four months after the last payment shall have become due and payable. Suit shall be commenced within two years after filing such claim with the clerk of the circuit court, or the lien shall be vacated.

29. Sub-contractor, mechanic, workman, etc. Every sub-contractor, mechanic, workman or other person, who shall hereafter, in pursuance of the purposes of the original contract between the owner of any lot or piece of ground, or his agent and the original contractor, perform any labor or furnish any materials in building, altering, repairing, beautifying or ornamenting any house or other building or appurtenance thereto, on such lot or on any street or alley, and connected with such building or appurtenance, shall have a lien for the value of such labor and materials upon such house or building and appurtenances, and upon the lot or land upon which the same stands, to the extent of the right, title and interest of such owner at the time of making the original contract for such house or the improvement; but the aggregate of all the liens hereby authorized shall not exceed the price stipulated in the original contract between such owner and the original contractor for such improvement. In no case shall the owner be compelled to pay a greater sum for or on account of such house, building or other improvements than the price or sum stipulated in said original contract or agreement, unless payments be made to the original contractor, or to his order, in violation of the rights and interests of the persons intended to be benefited by section thirty-five of this act: *Provided*, if it shall appear to the court that the owner and contractor fraudulently, and for the purpose of defrauding sub-contractors, fixed an unreasonably low price in their original contract for the erection or repairing of such building, then the court shall ascertain how much of a difference exists between a fair price for the labor and material used in said building or other improvements and the sum named in said original contract. Said difference shall be considered a part of the contract and be subject to a lien, but in no case shall the original contractor's time or profits be secured by this lien, only so far as the sum named in the original contract or agreement.

30. Notice—form. The person performing such labor, or furnishing such materials, shall cause a notice, in writing, to be served on such owner or his agent, substantially in the following form:

To.....: You are hereby notified that I have been employed by to (here state whether to labor or furnish material, and substantially the nature of the undertaking or demand) upon your (here state the building, and where situated, in general terms), and that I shall hold the (building, or, as the case may be), and your interest in the grounds liable for the amount that (is or may become) due me on account thereof.

Date.

Signature.

Provided, Such notice shall not be necessary where the sworn statement of the contractor, provided for in section thirty-five of this act shall serve to give the owner true notice of the amount due, and to whom due. [As amended by act approved June 16, 1887.]

31. Copy of contract—time of service. If there is a contract in writing between the original contractor and the sub-contractor, a copy of such sub-contract, if the same can be obtained, shall be served with such notice, and attached thereto, which notice shall be served within forty days from the completion of such sub-contract, or within forty days after payment should have been made to the person performing such labor or furnishing such material.

32. Notice to non-resident owner. In all cases where the owner cannot be found in the county in which said improvement is made, or shall not reside therein, the person furnishing labor or materials shall file said notice in the office of the clerk of the circuit court, who shall enter, in a book to be kept for that purpose, alphabetically, the names of the owners, and opposite thereto the names of the persons claiming liens, for which the clerk shall receive a fee of 50 cents. A copy of said notice shall be published in some newspaper printed in said county, for four successive weeks after filing such notice with the clerk as aforesaid. If, however, there is no paper published in said county, then the claimant of the lien shall post notice in four of the most public places in the vicinity of said improvement.

33. Limited to amount due contractor. No claim of any sub-contractor, mechanic, workman or other person shall be a lien under section twenty-nine of this act, except so far as the owner may be indebted to the contractor at the time of giving such notice, as aforesaid, of such claim, or may become indebted afterward to him as such contractor.

34. Owner may retain money, etc. When the owner or his agent is notified, as aforesaid, he may retain from any money due or to become due the original contractor, an amount sufficient to pay all demands that are or will become due such sub-contractor, mechanic, workman or other person so notifying him, and may pay over the same to the persons entitled thereto. In case there is not a sufficient amount due to such original contractor to pay such persons so entitled in full, the same shall be divided and paid to such persons *pro rata*, in proportion to the amounts due them respectively at the time of such payment. All payments so made shall, as between such owner and contractor, be considered the same as if paid to such original contractor.

35. Contractor to make statement to owner. The original contractor shall, whenever any payment of money shall become due from the owner, or whenever he desires to draw any money from the owner, lessee or his agent, on such contract, make out and give to the owner, lessee or his agent, a statement under oath, of the number, name of every sub-contractor, mechanics or workmen in his employ, or person furnishing materials, giving their names and the rate of wages or the terms of contract, and how much, if anything, is due or to become due to them or any of them for work done or materials furnished, and the owner, lessee or his agent shall retain out of any money then due, or to become due to the contractor, an amount sufficient to pay all demands that are due or to become due such sub-contractors, mechanics and workmen or person furnishing materials, as shown by the contractor's statement, and pay the same to them according to their respective rights, and all payments so made shall, as between such owner and contractor, be considered the same as if paid to such original contractor. Until the statement provided for in this section

is made in manner and form as herein provided, the contractor shall have no right of action or lien against the owner on account of such contract, and any payment made by the owner before such statement is made, or without retaining sufficient money if that amount be due, or is to become due, to pay the sub-contractors, mechanics, workmen or persons furnishing materials, as shown by the statement, shall be considered illegal, and made in violation of the rights of the persons intended to be benefited by this act, and the rights of such sub-contractors, mechanics, workmen or persons furnishing material to a lien shall not be affected thereby. In order that the owner, lessee or his agent may be protected, he may at any time during the progress of the work, demand in writing of the contractor the statement herein provided for, which shall be made by the contractor and given to the owner, lessee or his agent, and if such contractor fail to furnish such statement within five days after demand made, he shall forfeit to such owner the sum of fifty dollars (\$50) for every such offense, which may be recovered in any action of debt before any justice of the peace. [Act approved June 16, 1887. In force July 1, 1887.]

36. Repeal. That sections thirty-six (36), forty-two (42), forty-three (43) and forty-four (44) of said act, and all other acts or parts of acts in conflict herewith, be, and the same are hereby repealed. [Act approved June 16, 1887. In force July 1, 1887.]

37. Suit to enforce lien, or against owner and contractor. If the money due to the person giving such notice shall not be paid within ten days after service thereof, as aforesaid, or within ten days after the money shall become due and payable, and any money shall then be due from such owner to the original contractor, then such person may file his petition and enforce his lien, in the same manner as is hereinbefore provided in case of original contractors, or he may sue the owner and contractor jointly for the amount due him, in any court having jurisdiction of the amount claimed to be due, and a personal judgment may be rendered thereon as in other cases.

38. Transcript of justice's judgment. If execution issued on a judgment obtained before a justice of the peace shall be returned not satisfied, a transcript of such judgment may be taken to the circuit court and spread upon the records thereof, and execution issued thereon as in other cases.

39. Proceedings for general settlement. If there are several liens, under section twenty-nine, upon the same premises, and the owner, or any person having such lien, shall fear that there is not a sufficient amount coming to the contractor to pay all such liens, such owner, or any one or more persons having such lien, may file his or their sworn bill or petition in the circuit court of the proper county, stating such fact, and such other facts as may be sufficient to a full understanding of the rights of the parties. The contractor and all persons having liens upon, or who are interested in the premises, so far as the same are known to or can be ascertained by the claimant or petitioner, upon diligent inquiry, shall be made parties. Upon the hearing, the court shall find the amount coming from the owner to the contractor, and the amount due to each of the persons having liens; and in case the amount found to be coming to the contractor shall be insufficient to discharge all the liens in full, the amount so found in favor of the contractor shall be divided between the persons entitled to such liens *pro rata*, in proportion to the amounts so found due to them, respectively. If the amount so found to be coming to the contractor shall be sufficient to pay such liens in full, the same shall be so ordered. The premises may be decreed to be sold for the payment of such liens as in other cases.

40. Claims cut off. All persons who shall be duly notified of such proceeding, and who shall fail to prove their claims, whether the same be in judgment against the owner or not, shall forever lose the benefit of and be precluded from their liens and all claims against the owner.

41. Stay. Upon the filing of such bill or petition, the court may, on the motion of any person interested, stay any further proceedings upon any judgment against the owner on account of such lien.

45. Failure to complete contract. Should the original contractor, for any cause, fail to complete his contract, any person entitled to a lien as aforesaid may file his petition in any court of record, against the owner and contractor, setting forth the nature of his claim, the amount due, as near as may be, and the names of the parties employed on such house or other improvement subject to liens; and notice of such suit shall be served on the persons therein named; and such as shall appear shall have their claims adjudicated, and decree shall be entered against the owner and original contractor for so much as the work and materials shall be shown to be reasonably worth according to the original contract price, first deducting so much as shall have been rightfully paid on said original contract by the owner, and damages, if any, that may be found to be occasioned the owner by reason of the non-fulfillment of the original contract; the balance to be divided between such claimants in proportion to their respective interests to be ascertained by the court. The premises may be sold as in other cases under this act.

46. Wrongful payments. No payments to the original contractor or to his order shall be regarded as rightfully made, if made in violation of the rights and interests of the persons intended to be benefited by this act.

47. Limitation. No petition shall be filed or suit commenced to enforce the lien created by section twenty-nine, unless the same is commenced within three months from the time of the performance of the sub-contract, or doing the work or furnishing materials, as aforesaid: *Provided*, if any delay in filing such petition or commencing suit is caused in consequence of the amount not being due the original contractor, the time of such delay shall not be reckoned.

48. Hotels, inns and boarding houses. Hotel, inn and boarding-house keepers shall have a lien upon the baggage and other valuables of their guests or boarders brought into such hotel, inn or boarding house by such guests or boarders for the proper charges due from such guests or boarders for their accommodations, board and lodgings and such extras as are furnished at their request.

49. Stable keepers, etc. Stable keepers and any persons shall have a lien upon the horses, carriages and harness kept by them for the proper

charges due for the keeping thereof and expenses bestowed thereon at the request of the owner, or the person having the possession thereof.

50. Agisters. Agisters and persons keeping, yarding, feeding or pasturing domestic animals, shall have a lien upon the animals agistered, kept, yarded or fed, for the proper charges due for the agistering, keeping, yarding or feeding thereof.

50a. Suit to be commenced within thirty days on demand. Upon the written demand of the owner or his agent, or any person interested in said real estate, served on the person or his agent claiming the lien, requiring suit to be commenced to enforce the lien, such suit shall be commenced within thirty days thereafter or the lien shall be forfeited. [Act approved May 31, 1887. In force July 1, 1887.]

50b. Court clerk's abstract—fee. The clerk of the circuit court where such lien shall be filed shall indorse on every such claim for a lien filed, the date of filing, and make an abstract thereof in a book kept for that purpose and properly indexed, containing the name of the person filing the lien, the amount of the lien, the date of filing, the name of the person against whom the lien is filed, and a description of the property charged with the lien, and for which the person filing the lien shall pay one dollar to the clerk. [Act approved May 31, 1887. In force July 1, 1887.]

50c. Neglect to satisfy lien paid—penalty. Whenever a lien has been claimed by filing the same with the clerk of the circuit court and is afterward paid, the person filing the same shall acknowledge satisfaction thereof in the proper book in such office in writing, and on neglect to do so for ten days after the claim has been paid, he shall forfeit to the owner the sum of twenty-five dollars. [Act approved May 31, 1887. In force July 1, 1887.]

Association Notes.

CHICAGO CARPENTERS' AND BUILDERS' ASSOCIATION.

The annual meeting of the association was held January 10, President Hearson in the chair. The minutes were read by Secretary James John, after which the association proceeded to elect officers for the ensuing year, as follows: president, William Goldie; vice-president, Oliver Sollitt; secretary, James John; treasurer, Peter Kauff; directors, William Hearson, J. W. Cassell, Francois Blair.

In receiving the report of Treasurer Kauff, the matter of the association funds being lost in the failure of the Traders' Bank, was discussed. Mr. Kauff was thoroughly exonerated from all blame, and the following resolution was unanimously passed:

Resolved, That this association will accept such amounts from Mr. Kauff as the Traders' Bank may pay on the total amount he had deposited there, and this association does hereby agree to release him from all responsibility as to the balance, and that the treasurer be instructed to deposit all money received in the future in the First National Bank at the association's risk.

The by-laws of the association were changed. Section 15, relating to time of meeting, was changed to read 12 M., instead of 7:30 P.M. Section 14, relating to quorum, was changed to read nine members to constitute a quorum.

The secretary's report showed the association to be active and in a flourishing condition.

ST. LOUIS ARCHITECTURAL LEAGUE.

A sketch club, under the above name, has been recently organized at St. Louis among the draftsmen, and gives promise of great activity and usefulness. Its object is the advancement and improvement of architecture and kindred arts. The officers are as follows: Louis C. Bulkley, president; J. P. Annan, vice-president; H. E. Eames, secretary; J. L. Wees, treasurer; L. H. Seubert, corresponding secretary and librarian. The organization has been formed somewhat on the plan of the Chicago Sketch Club. Suitable rooms have been procured and furnished at 515 Olive street.

Regular meetings are held every two weeks. The rooms are open from 10 A.M. until 10 P.M. Special evenings are given to lectures and sketching.

There are twelve monthly competitions, one semi-annual and one annual competition. The subject of the first monthly competition is a mantel for the League rooms.

Railroad Notes.

GREAT HOT SPRINGS OF ARKANSAS.—The famous all year round resort, the Iron Mountain route is the only direct line. Three daily trains from St. Louis with Pullman buffet sleeping cars and free reclining chair cars. Tickets at greatly reduced rates. Send to H. C. Townsend, general passenger agent, St. Louis, for Hot Springs guide.

TEXAS EXCURSIONS.—Tickets are now on sale at greatly reduced rates for the round trip via the Iron Mountain route to all winter resorts in Texas. The tickets are good until May 31, 1889, and ample stop-over privileges are allowed going and returning in the State of Texas. H. C. Townsend, general passenger and ticket agent, St. Louis, Mo.

CALIFORNIA excursions via Missouri Pacific Railway will leave St. Louis, January 8 and 22, by way of the Colorado Short Line to Pueblo and Denver. Via Iron Mountain route, will leave St. Louis, January 1, 15 and 29, by way of the popular southern route, the only running through Pullman buffet sleeping cars between St. Louis and Pacific coast points. The tickets for these excursions have a limit of six months with choice of returning route and ample stop-over privileges. H. C. Townsend, general passenger and ticket agent, St. Louis, Mo.

MR. L. M. WALTERS, the veteran California excursion manager, is creating quite a revolution in California travel. Mr. Walters guarantees to save those who patronize his excursions between \$25 and \$35. The Chicago & Alton and Union Pacific railroads have recently built and placed at Mr. Walters' disposal a number of new and very handsome tourist sleepers. These are modeled after the style of the regular Pullman sleeping car, and are built by that company. There is no upholstering in the cars, which is the only difference between the Pullman sleeping car and the Tourist sleeping car. Mr. Walters has overcome this by furnishing the cars with new carpets, cushions for the seats in the daytime, mattresses, pillows, sheets, blankets and curtains for the berths at night. Each car is provided with separate and commodious toilet rooms for ladies and gentlemen, in which will be found towels, soap, and all the necessities of a toilet room. A colored porter is in charge of each car. His sole duty is to cater to the wants of passengers, and a courteous excursion conductor accompanies each party through to the coast. Only second-class tickets are honored in these cars. Passengers are charged \$3 for lower berth and \$2.50 for upper berth, from Chicago to Los Angeles and San Francisco. Where two persons occupy a berth together, an additional charge of \$1 is made for the second person. Considering that passengers have all the advantages and comforts of a first-class sleeping car, these charges are very moderate, and save the passenger everything claimed by Mr. Walters. These excursion parties leave Chicago every second week, via the Chicago & Alton railroad. For further particulars, apply to any ticket agent Chicago & Alton railroad, or to L. M. Walters, general excursion manager, Sherman House, Chicago.

Obituary.

GEORGE BIGDEN, one of the oldest master plumbers of Chicago and a member in good standing of the Chicago Master Plumbers' Association, died January 16. Mr. Bigden was a former partner of E. Baggot. The funeral was attended by the Master Plumbers' Association in a body. The pall bearers were Messrs. E. Baggot, J. J. Hamblin, D. Rock, Mr. Cavanaugh, David Whitford. The funeral occurred January 18, at 2 P.M.; the interment at Oak Park Cemetery.

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